Towards a Practitioner-Centric Paradigm of MIS Development and Organisational Knowledge Creation in Social Care Organisations

by

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Abbreviations

ADSS	Association of Directors Of Social Services
CCTA	Central Computing and Telecommunications Agency
CAF	Common Assessment Framework
DoH	Department of Health
ESCR	Electronic Social Care Record
ECM	Every Child Matters
IfSC	Information for Social Care
ICS	Integrated Children's System
IT	Information Technology
IS	Information Systems
ISA	Information Sharing and Assessment
LAs	Local Authorities
MIS	Management Information Systems
NISW	The National Institute for Social Work
NSF	National Service Framework
PC	Personal Computer
OT	Occupational Therapist
SCIE	Social Care Institute for Excellence
SOCITM	Society of Information Technology Managers
SSI	Social Services Inspectorate
VOIS	Voluntary Organisations Internet Server

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Thesis Abstract

This study explores the Management Information Systems' (MIS) implementation and utilisation in social care organisations. The aim of this thesis is to study the level of social work practitioners' involvement in MIS selection and implementation and to determine the links between the utilisation of MIS in social care organisations and the creation of organisational knowledge. Thus, the thesis endeavours to increase understanding of the importance of MIS implementation for personnel and organisations, to capture its meaning and any implications this may have for organisational knowledge and social work practice.

To further this aim, a two case-study design was developed and carried out in two social care organisations in England. Semi-structured interviews and direct observation were used as data collection tools. Interviews with open-ended questions were carried out with practitioners, team managers, senior managers and staff responsible for Information Technology applications and programmes. Data analysis was carried out utilising two key methods, within-case and cross-case analysis. The purpose of the analysis was to illustrate the participants' experiences within five main themes: Practitioners' and Team Managers' Feelings about the new MIS' Implementation, Participation, Management Information System, Social Work Practice, and Organisation and Organisational Knowledge.

The research findings highlighted that social care organisations need radical shifts in organisational philosophy in order to achieve functioning MIS, and more importantly, to become 'learning organizations' that capture and disseminate social work practice knowledge and skills. For example, practitioners' participation in MIS implementation was recognised as a key factor, which determined both MIS implementation and organisational knowledge creation in a social care organisation. The qualitative data gathered also revealed that there were constraints in engaging practitioners with organisational procedures and in make them feel valued. The thesis, based on the research findings, concludes with the proposal of two models for MIS implementation and organisational knowledge creation.

CHAPTER 1: Introduction

1.1 Introduction to the Study

Social work addresses the multiple, complex relationships between people and their environments. Its mission is to ensure that all people are able to develop their full potential, improve their lives, and prevent difficulties which might lead to social or psychological disadvantage (IFSW, Adopted by the IFSW General Meeting in Montréal, Canada, July 2000). Information management is a critical aspect of social work practice, administration, and evaluation (Parton, 1998, 2009). Relationships between the practitioner and client, the organization and its funding sources, and researchers and practitioners, are characterized by the exchange of information (Johnson et al., 2001). Similarly, academic research on user-centred design and implementation of MIS and the debate on Integrated Children's System (ICS) have developed a new area of concern and ongoing discussion for social care organisations and social work practice more widely (Wastell et al., 2008, White, 2008a, 2008b, White et al., 2009, Shaw et al. 2009a, 2009b, 2009c).

It is anticipated that Information and Communication Technology (ICT) increasingly will be used to improve the collection, management and distribution of information within social care organizations. The potential benefits from developing technology applications to support practice and research are achieved when technological applications are proactively created through a collaboration and involvement of all possible stakeholders and used as an administrative and evaluation tool.

Since the invention of computers, their utility was found to be of maximum value in the United Kingdom especially in social security systems. The Department of Health and Social Security introduced the early use of computers for its social security tasks almost five decades ago, back in 1959 (Margetts & Willcocks, 1992). That Department was instrumental in the satisfactory utilization of advanced changes in information systems.

Social care organisations are an crucial sphere of activity, which contributes enormously to the social and economic well being of all citizens of the United Kingdom. Access to information and effective record maintenance is crucial thrust areas in social care and information systems play a crucial role in performing these

tasks. Keeping these points under consideration, the present study area of research about the role of Management Information Systems (MIS) in social care organisations has been selected. Social care systems strive to be improved for the growth and welfare of society as a whole and, in consequence, this requires that social care organisations to combine practices and tools which have been well utilised in other sectors, and have generated satisfactory results.

The thesis aims, firstly, to explore the process of MIS design and implementation in social care organisations in England by studying the involvement for social work practitioners in this process and how they experienced it. Secondly, the thesis aims to explore the influence of MIS utilisation on organisational knowledge creation and social work practice.

To achieve these aims, the thesis has set two major objectives:

1. To study and discuss the experience of social work practitioners and managers with MIS implementation in social care organisations.
2. To discuss the links, if any, between MIS and organisational knowledge creation in social care organisations.

In this process, the thesis firstly will establish the background of ICT utilisation in social care organisations in England in order to be able to understand better how ICT and its applications have been used so far, and how social care organisations have been influenced by it. To this end ICT, information systems (IS), MIS and the terms social services, social care organisations, social services departments are defined as the main threads of the thesis. The use of ICT in social care, various constraints on this, how policy development has contributed to that process and, finally, how organisational learning and knowledge are formed within these developments are discussed in order to reach closure.

1.2 Background to the Research

1.2.1 Terminology and Clarification of Terms

It is essential to explain the use, in this thesis, of terms which will be discussed throughout the text and constitute the basis of discussion. This includes

the terms social care organisations, social services and social services departments, social work and social workers as well as the terms ICT, IS and MIS. By clarifying these terms it is ensured that the reader will be assisted to his/her understanding of the thesis.

The term social care organisations will be used throughout the thesis and it has been selected in order to represent social services with their new status and roles. The term “social services” is used as a general term, which includes the whole social care sector. Lastly, the term “Social Services Departments” as the department of the local council with responsibility for assessing the needs of, and providing support to, older, disabled or vulnerable people in the community in line with statutory law and government guidance is used mainly in the empirical part of the thesis because at the time of the fieldwork that was the term in current use. In more recent years, the term is not used often as organisations have separated out into specific services for adults and others for children.

The terms social work practice and social work practitioner are used respectively to describe the practice which is carried out by the professional social worker who acts as an agent to assist and or empower individuals, groups, families and communities to prevent, improve or better cope with crisis, change and stress to enable them to function more effectively in all areas of life and living.

For the general population, ICT means a branch of science that deals with the application of information systems and computer software for various businesses and daily activities. It was also defined as “any technology used to support information gathering, processing, distribution and use” (Beynon-Davies, 2002:4). ICT provides a means of constructing aspects of information systems, but is distinct from information systems. Modern ICT consists of “hardware, software, data, and communications technology” (Beynon-Davies, 2002:4). The above definition is chosen because it differentiates ICT from information systems and it offers the background for selecting a useful definition of information systems.

The term “Information System” is often used to denote a computer system, or more broadly, an interrelated mechanical system of information and communication technologies such as the World Wide Web. However, more formal academic definitions recognise the socially embedded nature of these technologies:

‘Traditionally, an information system has been defined in terms of two perspectives: one relating to its function; the other, to its structure” (Hirschheim et al., 1995:15)1.

For the purpose of this thesis, IS includes the hardware and software components which go to make up Information and Communication Technologies (ICT) and the social system which coordinates the organised provision of information. Management Information Systems as a kind of information systems are the main interest of this thesis. Many definitions of MIS have been proposed in technical and business literature over the past three decades. While debate continues within the academic MIS community as to what MIS means, a definition offered by Brabb (1987) includes all the necessary elements of an MIS:

“A management information system is the complement of people, machines, and procedures that develops the right information and communicates it to the right managers at the right time” (Brabb, 1987).

The inclusion of people, machines (technology), procedures (process), information, communication and management in this definition served to illustrate the complex, interdisciplinary nature of MIS. At the same time, it also emphasised the necessity of providing adequate information to the social work practitioners and managers at the right time because this would prepare them to provide appropriate and timely social care services.

The definition also of MIS by the UK Academy for Information Systems (UKAIS), (1999:5) referred to MIS as: “The management of the specialist knowledge and capabilities associated with the applications of information systems and ICT to deliver and sustain beneficial use, and the development of best practice in information systems provision and governance”. This definition attached to MIS a broad range of activities and emphasised its important contribution to the field of best practice and governance of IS in organisations.

[1] From a structural perspective, an information system consists of a collection of people, processes, data, models, technology and partly formalised language, forming a cohesive structure which serves some organisational purpose or function. From a functional perspective, an information system is a technologically implemented medium for the purpose of recorded, storing, and disseminating linguistic expressions as well as for the supporting of inference making (Hirschheim *et al.*, 1995:15).

1.2.2 Development and Use of Computers in Social Care Organisations

The following sections will highlight the issues which provide important contextual background information to the thesis starting of with the development and use of computers in social care organisations. The main issue discussed in social care, regarding the effective utilisation of ICT, is the lack of access to information regarding the affected people and needy groups. With the advancement of ICT, the opportunity to have access to large quantities of necessary information has increased considerably.

Though computers were introduced in the social care sector in the UK in 1959, they were first utilized within social services in the 1970s (Glastonbury 1993, 1996) with the use of client information systems. Since then the context of social care has changed greatly, with the result that more advanced ICT applications are required to respond to the increased requisite for recording and managing information within social care organisations. The positive role of ICT and IS in social and health care has been reported by several authors and researchers (Austin 2002; Ziegler 1998).

Developments in computer hardware and software offer organisations the opportunity to collect information for use in quality management, programme planning and research (Russo & Fitzgerald, 2001). Organisations in social care are expected to collect and analyse information about their services to both justify funding and to improve the quality of services. There are three important reasons for the collection of information in a systematic manner. Firstly, accountability and management of limited resources require organisations to be able to justify where and how they spend given resources, which in turn secures continuation of social care programmes. Secondly, planning of new services and programmes has to be based on data collected through evaluation of previous programmes in order to avoid costly mistakes regarding use of resources and time, planning of activities and in general providing services which are closer to service users' needs. Finally, data collection is important for information sharing among organisations in health and social care in order to facilitate better quality of services.

During the 1990s, Information Technology applications and information systems in particular performed an important role in the world of social care

organisations because they were identified as tools for collecting and storing information about service users' needs for service development. For example, the significance of information systems is very much appreciated in the field of home and social care systems. In particular, when the confidentiality of clients is to be maintained while working in the home care systems, the home care workers have been giving priority to the secrecy of client information and both formal and informal information systems would certainly play a key role in this context (Cooper & Urquhart, 2004).

Around 20 years ago, Caputo claimed that human services were decades behind the business world in using IT (1988). Cnaan (1989) described further that we were light years away from using computers in service provision. Their views were echoed by Kerslake (1996) that social services departments in the UK were clearly on the periphery of fully utilising ICT potential. However, the key role played by information technology in voluntary organizations for social work cannot be underestimated. For example, ICT and IS were well utilized by VOIS (Voluntary Organisations Internet Server) by launching a service whereby voluntary organisations could easily create a presence on the World Wide Web within a standardised package. This facilitated the creation of an online community for the voluntary sector (Wilcox, 1996). The National Institute for Social Work (NISW) also availed itself of information technology by establishing a free dial-up bulletin board covering a range of on-line resources, along with a free e-mail gateway to the Internet. The NISW disbanded in 2002 and has in part been replaced by the Social Care Institute for Excellence (SCIE).

1.2.3 Constraints on the Implementation of ICT and IS in Social Care Organisations

There appears to be a major discussion on the constraints of successful implementation of IS in social care organisations. The major constraint for the implementation of IS in social care organisations was identified as the lack of financial investment in IS (hardware and software) (Barnes, 1996, Kerslake, 1996). The financial outlay allotted by the government and non government

organizations for the social services had not been satisfactory, leading to its poor penetration into this sector.

However, Kerslake (1996) also mentioned that greater expenditure would not have solved the information problem, indeed higher funding might only have generated more expensive and complex systems (ibid, 1996); but as a contrast, IS planning was what was missing in general (Law, 1994). Inadequate resources for IS planning, was only part of the reason. Some of the managers of social care organisations as well as social workers were also themselves not convinced that analysis and design work could cost a lot more than programming tasks. It was therefore not unusual to find a group of social workers who were advanced users of computer programmes, driving an IS development project at the most crucial stage of system analysis (Kerslake, 1996).

Another important constraint, identified by Carrilio (2005), was the inability of social work practitioners to recognise the advantages of IS utilisation resulting in poor exploitation of electronic information systems and other applications such as Internet, intranet, e-mail etc. The failure to understand that the use of personal computers (PCs) or IS in social care organisations should neither alienate staff from the client group nor jeopardise the principles of confidentiality and anonymity in social work practice particularly regarding the sharing of information about a client's case, had resulted in poor utilization of IS in social services (Carrilio, 2005). Information systems could be useful both organizationally and at the individual practitioner level. For the practitioner, however, the attachment of these systems to management needs (Fitch, 2005) could create a sense of distance from the data and concern about its possible uses. According to Parrott et al., (2008) social workers also resisted IS because it could lead to their de-professionalisation and depersonalization from the social work task.

Further constraints appeared in the form of conflicting ideological views about data and its utilisation resulting in social care organisations not having regular use of management information systems (Carrilio, 2005). Sometimes, this conflict in ideology was created due to a profound lack of agreement about basic rules and regulations and user friendly guidelines (Carrilio, 2005). As a result, social work practitioners resist the implementation of a new system because their experience of the design process had not been a positive one, and has not,

therefore, facilitated the development of the information system's ownership by social workers. An additional constraint suggested by Carrilio (2008:137) was that information systems might be perceived by practitioners as coming from 'on high'. Although information systems brought great prospective for helping practitioners to improve their practice they were often seen as imposed by the upper levels of management, and not embraced as a self-monitoring or reflective tool by social work practitioners. In the following section explores the relationships among MIS, social work practice and organisational knowledge and learning.

1.2.4 Organisational Knowledge and Organisational Learning in Social Care Organisations

Reliable and timely information is necessary to organisations, in order for them to respond to rapidly evolving clients' needs, to design and monitor policies and social care reforms, to evaluate the impact of services, and to define budget priorities. MIS can be used as a dynamic and flexible infrastructure for the monitoring of social care activities and clients' needs at local or national level. As it was mentioned earlier MIS encompasses the individuals, values, legislation, inter-institutional relationships, technology and standards which contribute to the different stages of data processing (UKAIS, 1999). These stages include the collection, analysis, storage, transmission, display, dissemination, and further utilization of data and information from complementary sources (Russo & Fitzgerald, 2001). The goal of the MIS is to allow all professionals within a social care organisation to use, to interpret and to share information in order to transform it into knowledge.

Social work as an academic field encourages the study of theoretical approaches such as the effect of learning organisation on social care organisations. Even though organisational learning has been an important concept in organisational analysis over the past 45 years, the major evidence has been provided by private sector organisations. Rist (1994:192) pointed out "what we know of organisational learning is what we know from the private sector". At the same time, public sector services seemed to move very slowly towards the adoption of new management philosophies and practices. Most of the work that

has been conducted on the concept of the learning organization has focused on private sector companies (Finger & Brand, 1999). In spite of the importance of the concept of learning organizations to public sector organizations, very few studies have attempted to examine the effectiveness of different prescriptive models to these organizations (Smith & Taylor, 2000).

Nevertheless, there is a growing academic interest in social work literature on organisational learning and organisational knowledge creation (Gould, 2003; Foster et al., 2008; Harlow & Webb, 2003; Taylor, 2004). Organisational knowledge creation includes both organisational learning and the learning organisation. Organisational learning is a summation of existing processes which are crucial in deciding the major course of action in social services, and the learning organisation is an ideal form of an organisation to which the social care sector can aspire for better knowledge creation (Ortenblad, 2001). The interest in organisational learning in the UK was mainly driven by the transition that occurred after the election of the New Labour government in 1997. The inclusion of its philosophical underpinnings and orientation towards new ideas such as organisational learning has also influenced social work literature.

Organisational change dynamically created by the everyday actions of personnel engaged in their everyday work, considerably but nevertheless constantly, recreates and reinstates organizational knowledge. Drawing particularly on the work of Polanyi (1962) and the work of Nonaka and Takeuchi (1995), Tsoukas and Vladimirou (2001) are concerned, firstly, with the primary re-conceptualization and definitional work of knowledge as “personal”. In other words, there is no “knowing” without the personal, human action of making distinctions. Second, drawing on Wenger (1998), they state that these differences are always made in a framework or sphere of action: “knowing how to act within a domain of action does making competent use of the categories and the distinctions constitute the domain” (Tsoukas and Vladimirou, 2001:978). Knowing, therefore, inevitably entails acceptance of mutual understandings of language use and meanings gained through the process of socialization (Berger and Luckmann, 1984).

Tsoukas and Vladimirou (2001) revisited the essential notion of organization as producing persistent behaviours through the adoption of rules and

generalizations, then argue that organizational generalizations are made on the basis of shared or social understandings and meanings. Context, work practices, roles and structures are defined, created and disseminated using collectively meaningful language. These generalizations supply the basis for “rules” created as propositional statements (if X, then Y, under Z conditions) to direct organizational action. Rules so endorsed then reveal organizational knowledge. As a result, organization is “a densely connected network of communication through which shared understandings are achieved” (Tsoukas and Vladimirou, 2001:981). Organizational knowledge is “the capability members of an organization have developed to draw distinctions in the process of carrying out their work, in particular concrete contexts, by enacting sets of generalizations whose application depends on historically evolved collective understandings” (Tsoukas and Vladimirou, 2001:976).

The concept of organisational learning had influenced management in the public domain at large. The systematic assessment of organisational learning in the public sector started at the end of the 1980s and the beginning of the 1990s, but was not heavily driven until the 1997 election of the New Labour government, as it has been already mentioned (Newman, 2000, Mitchell, 2000). Yet it was quite unclear whether the nature of organisational learning could have a similar positive meaning in both the private and public sector. Organisational learning was used by the public sector in a completely different manner from that of the private sector. According to Mark and Willcocks (1989) if organisational learning results in inter-organisational competition and public services adopting private management practices, the wider public interest was unlikely to be served appropriately or effectively. In addition, Handy (1990) characterised organisational learning as 'properly selfish' without clear roles, goals and ethos for public services.

Similarly, Edmonstone (1990) observed that organisations operating in the public domain met more obstacles on their way to becoming learning organisations than private sector enterprises. It was also opined that the major reason for this was the high degree of bureaucratisation of public sector services. Thus, Attwood and Beer (1988), in examining development work in public health organisations in UK, argued that it was quite difficult for public sector services to become learning

organisations. According to their view, public sector services needed to adopt activities such as refining the organisational objectives for planned change.

The theme of organisational knowledge creation is connected with social care organisations especially in terms of discussing how social workers store, utilise and reflect upon professional knowledge and what opportunities are available within social care organisations for organisational learning (Foster et al., 2008). The basic process of organisational learning is the creation of knowledge and the way that this knowledge spreads within an organisation (Senge et al., 1994). Organisational learning from this point of view is closely linked with organisational sense-making processes, which are principally interpretative routine used by decision makers to detect problems, define priorities, and develop an understanding of how to deal with performance discrepancies (Senge et al., 1994). According to Senge (1990), organisational learning was the process through which managers sought to improve an organisation member's desire and ability to understand and manage the organisation and its environment so that they could make decisions that continuously raised organisational effectiveness. However, it is understood that managers in social care organisations faced a difficulty that was not so much the acquisition of information but how to use it constructively in order to assist organisational learning, which in turn would lead to organisational knowledge creation (Moore, 2002, cited in Foster et al., 2008).

Later developments in policy and practice in the field of social care organisations have shown the importance of utilising IS in social care organisations taking into consideration local needs, organisational needs and practitioner needs (Munro, 2010, 2011a, 2011b). Although the Social Care Institute of Excellence has made several efforts to promote the notion of knowledge managements in social care by publishing relevant reports (Pawson et al., 2003, Beverley, 2009) organisational knowledge creation with the use of MIS towards this end remains underdeveloped while the emphasis is still to effectiveness and efficiency in protecting vulnerable children and adults, including the removal of over-bureaucratized lengthy procedures.

Through the duration of this project there were not any publications identified in the field of organisational knowledge or knowledge management and MIS for social care organisations. Of course several studies (Wastell et al., 2008,

White, 2008a, 2008b, White et al., 2009, Shaw et al. 2009a, 2009b, 2009c) have developed an important discourse in the light of evaluating CAF and ICS and also the Munro Review of Child Protection (Munro, 2010, 2011a, 2011b). Retrospectively it is believed that the thesis could offer the background for this fruitful debate offering evidence drawn from practice source at an earlier stage in the decade before changes such as ICS and CAF were implemented.

1.3 Research Problem and Research Questions

In today's global environment, change rather than stability is the order of the day. Rapid changes in technology, cultural values, social life, competition and citizen/customers' demands have increased the rate at which organisations need to alter their strategies and structures in order to survive and operate successfully. As the pace of change has increased, the importance of planning, monitoring, and controlling activity has decreased. Thus, business systems nowadays tend to move organisations towards a world of work where everything is in flux and where continued learning is the only stable goal. Public as well as private organisations need to have the capacity to be adaptive (to learn the know-how of solving problems) and generate knowledge (to establish new methods of solving problems).

Social workers are a group of professionals who are required to carry out their professional duties using electronic record keeping, electronic case management, and electronic communication in intra-organisational and external relationships. In the light of the transfer of public services into the digital era and more specifically with the implementation of new MIS in social care organisations, social work practitioners experience a number of changes including those related to social work practice such as the extent and nature of information to be collected and client details (White et al., 2009). Consequently, social workers are under pressure to complete the binary aim to provide quality services according to the clients' needs (service users and carers) and simultaneously to be prepared to adjust to new working environments which require extensive use of ICT applications and electronic systems in order to carry out their duties (Mithran, 2006a). This means that all social workers and in particular those involved directly

with care management have to become more computer literate and to use ICT as an integral part of their daily working lives. In an environment of heightened accountability and expectations that intervention outcomes will be measured, the practitioner is commonly instructed by managers and researchers to collect data about what he or she is doing. External pressures on practice also are placed by funding sources, politicians, and legislation (Carrilio, 2008).

This thesis explores how social work practitioners including front-line social workers, team managers, and senior managers experienced the transition from a paper-based office to electronic-based. More specifically, the thesis explores the role that social care staff has within every organisational environment, for updating their current knowledge. For example, how team managers will collect, analyse and synthesise information, facilitate adaptability and implement strategic decisions in order to encourage learning and knowledge creation. Because it is still questionable how far learning and knowledge creation has been achieved due to MIS utilisation in social care organizations, thorough analysis is needed on how MIS influence the development of knowledge and organization learning.

The overarching question which leads the inquiry in this thesis is the following:

- What can we learn about the process of designing and implementing a MIS in social care organisations with particular reference to social work?

The following sub questions were developed in order to support the overarching question and specify the research aims and objectives:

1. How did the social care staff including social workers, team managers, senior managers and IT staff experience MIS implementation?
2. What have been the results, if any, of MIS utilisation on the two social care organisations?
3. What have been the consequences, if any, of MIS utilisation on social work practice within these organizations?
4. What opportunities, if any, did MIS utilisation introduce for social care staff to create organisational knowledge, and how was knowledge creation linked back to MIS utilisation?

1.4 Research Aims and Objectives

This research explores how social work practitioners, team managers, senior managers and IT staff experienced the design and implementation of the MIS in their organisations. Issues of special interest here include staff involvement during the process, professional resistance to the system once it is implemented and the understanding of system ownership by social work practitioners. The thesis also intends to identify how the MIS influence social work practice and social care organisations. This explores how social work practice changes with MIS utilisation by social work practitioners. To achieve that, the thesis discusses issues such as professional discretion, deskilling of social workers and social work values as these were considered fundamental by the research participants. In terms of social care organisations the research explores changes to the organisational structure, culture and organisational knowledge creation.

The thesis also explores whether and how social workers contribute towards the creation of social work practice knowledge for social care organisations. Social workers accumulate a mass of information from their daily practice so it is important to distinguish and acknowledge how they utilise this information in their practice and how all this information could be translated into organisational knowledge. Thus, this action intends to explore how the use of MIS could be a first step towards knowledge creation, accumulation and dissemination by social workers.

The overall aim of this thesis is to explore what social care organisations have learned from the implementation of MIS regarding practitioners' involvement in the process, social work practice, and organisational knowledge. To achieve this two objectives have been identified: Firstly, to explore and discuss the implementation of MIS in social services and how it affects social work practice, social care organisations and social work practitioners. Secondly, to identify how social workers can contribute towards the creation of organisational knowledge.

1.5 Research Approach

The research approach followed to carry out the fieldwork is discussed in detail in Chapter 4. However, here it might be helpful to emphasise the main

aspects of the approach selected to study the topic. It is also considered important to state that the literature review started back in 2002 while the fieldwork started in 2003 and completed in 2004. This partly explains the outdated bibliography in some parts of the thesis. Effort has been made to include recent research findings and references as much as it was possible.

A qualitative inquiry has been developed in order for the researcher to focus on live experiences of the participants and to try to make sense of the meanings of events, experiences and states to participants themselves about social care organisations and the use of MIS. To this end inductive reasoning selected because it allowed the researcher to explore in open context themes and issues derived from a variety of sources such as the policy context and theories. Case-studies of two organisations have been used as the research fieldwork and semi-structured interviewing and observation were the data collections tools. Two-levels of analysis, namely within-case and cross-case analysis were utilised to analyse data and address the research questions whereas the findings derived are also discussed with the literature review on a third and final level of analysis.

Thinking about the research retrospectively and more theoretically, I have come to feel that the research study has exhausted the theoretical fields it dealt with at the time it was written. The research approach thus might not propose what is ahead, but instead reflect on and pass on the current position and state of the researcher in relation to theoretical, methodological and presentational matters. Instead of a binding prospective document, it will serve as a significant point of reference for the researcher herself, as well as for other readers, such as supervisors and examiners, allowing all an impression of the researcher's current stance. The approach in this sense is an "introduction," a "first-step," an open reflexive chapter in a longer track, of choosing research approaches in the future.

Indeed, during the years of writing this thesis I have made use of the research approach as means to explore possibilities of implementing it in various settings and establish research inquiries. Such inquiries would generate exploratory qualitative research data rather than a positivist one, data that describes rather than prescribes. This is not to suggest that discussion of theory and literature was omitted, but that these discussions should not be directed towards the future; instead, they should reflect on the present and the inner.

1.6 Thesis Structure

The thesis is structured in three parts:

Part I includes Chapter 1 which introduces the thesis background, research aims and objectives. Chapter 2 explores the policy context relevant to IT implementation and utilisation, while Chapter 3 reviews the literature and explores the themes of IT and MIS for social care organisations. Finally, it examines social care organisations and their management.

Part II locates in Chapter 4 the work in its research tradition, formulates the research problem and objectives, discusses the research approaches available in the field and justifies the research design. Chapters 5 and 6 present the research findings within the first method of analysis named within-case analysis and Chapter 7 presents the second method that of cross-case analysis. Lastly, Chapter 8 incorporates the research findings of the three previous chapters with the literature review.

Part III and Chapter 9 incorporate the theoretical developments of parts I and II into a framework with an account of connections between the research findings and the literature review. From these connections a Practitioner Centric Model for MIS implementation and organisational knowledge creation has been developed. The thesis concludes with reflections upon the findings, research limitations and suggestions for further research.

CHAPTER 2: The Policy Context and Information and Communication Technology Implementation in Social Care

2.1 Introduction

The introduction of policies to improve the social care sector in England with the utilisation of ICT has created considerable discussions about the future of social work practice, the role of social work practitioners and social care organisations. Chapter 2 discusses policy's implications for implementing ICT in social care organisations and how policy has prepared the ground for ICT implementation in social care organisations as the policy influences various changes affecting social work as a professional activity. What is possible, what is encouraged, what is not included is bounded by the policy frameworks governing practice and affected by those governing the lives of service users.

The main policy documents relevant to this study which are going to be discussed are: The White Paper Modernising Social Services: Promoting Independence; Improving Protection; Raising Standards of 1998 (DH, 1998), the initial framework strategy, Information for Social Care (IfSC), (DH, 2001) and the Green Paper 'Every Child Matters' (ECM) (DfES, 2003). Those three policy initiatives were chosen as they had considerable links with the thesis. The White Paper was considered important for discussion because it marked the beginning of an era of organisational changes for social care organisations while the other two documents were introduced at the time this study was carried out and also had a substantial influence on social care organisations and ICT. The time frame of the thesis meant that the focus of the study was on the earlier policy changes and related practice. The findings are briefly revisited in light of later policy changes, including for example, policy reviews such as the Munro Review (2010, 2011a, 2011b) on child protection.. Some exploration was made regarding any new issues arising relating to MIS and social work practice but it was not feasible for the thesis to wait for the academic and research response to new developments in policy. In retrospect policy reviews such as the Munro Review (2010, 2011a, 2011b) on child protection might be worth looking at as well as wait to observe

the reaction on policy development as well as practice developments in social care organisations.

The White Paper was selected for study here because of the radical changes it introduced and its organisational implications for social workers (Harris, 2003; McDonald, 1999). The White Paper "focused upon breaking down barriers between services and working toward 'a flexible partnership' in order to tackle the health agenda in a wider sense. The White Paper stressed the importance of "promoting independence, improving consistency, and providing convenient, user-centred services" (Brown et al., 2002:86). It was argued in the White Paper that the achievement of such goals required the implementation and utilisation of ICT.

The initial framework strategy, Information for Social Care (2001), and the subsequent NHS Plan (DH, 2001), sought to improve information management with regard to (1) putting the citizen or service user at the centre; (2) making appropriate information accessible in a suitable form for citizens, service users, and care providers; (3) creating openness and accountability to promote confidence in the value of the information held; (4) enabling information to be shared between partner agencies; and (5) supporting cultural change to ensure information is seen as a vital and unique resource (Staton, 2002). Staton (2002) wrote, "This can only be achieved if an appropriate information management and technology infrastructure is in place in both health and social care" (p. 23).

The White Paper (1998) and the Information for Social Care (2001) strategy are dependent upon ICT implementation in health and social care. This need is clearly recognized: "In June 2002 the Department of Health launched a new national programme for the delivery of IT in the NHS" (Staton, 2002:23). The purpose of the programme was to critically analyse the impacts of those policies regarded as key features in understanding the extent of changes required for both health and social care organisations and the professionals.

The Green Paper 'Every Child Matters' (DH, 2003) was chosen for discussion as it marks a significant change in thinking about children's services in England and indicates the beginning of a major period of reform and change. With ECM the government was provided with an ideal opportunity for introducing wide-ranging and radical changes which aimed to realise the potential of all

children (Parton, 2006). The Green Paper has also had a profound impact on the development of new ICT systems as the E-Government agenda was seen as having major implications for the reform and development of children services. The introduction of more integrated services was seen as very much dependent on the implementation of new information systems, which would facilitate the potential for identifying problems and enhance attempts to intervene at an earlier stage and also allow for effective multidisciplinary information sharing among organisations and professionals.

2.2 The White Paper Modernising Social Services: Promoting Independence; Improving Protection; Raising Standards

The White Paper (DH, 1998) was the first major policy initiative of the newly elected Labour government. At that time it was regarded as an important document because it introduced major changes aimed at modernising social care organisations. The new government began a profound movement towards a different kind of political orientation as it claimed to pursue a 'Third Way' of political thinking and action. The 'Third Way' (Blair, 1998) promised new political responses to meet the needs of modern citizens and social inclusion in a stakeholder society. The 'Third Way' refers to the detachment from the ways of the Conservative administration and the New Right paradigm as well as the replacement of Old Labour's principles and ideas (Harris, 2008). The 'Third Way' suggested a new kind of practice and policy implementation as it brought to the front-line cooperation between the public and the private sector. For example, public and private partnerships were to be developed for the provision of services previously provided only by the public sector. The White Paper also shifted the provision of services from public to private and independent not-for-profit initiatives.

The White Paper was the new government's response to the failures of the previous Conservative government to successfully implement an overall policy and strategy for social services (Mitchell, 2000). Although it recognised that there were excellent services in some places, there were others that failed to support the

people who needed services the most. The aspects of social services identified as needing immediate attention were:

- Problems in co-ordinating social services with the NHS and housing services;
- The inflexibility of social services and in particular the tendency to offer services according to what was available rather than what the client needed;
- Financial inefficiency and waste of valuable resources;
- The need to develop IT as a tool to contribute to the modernisation of social services (DH, 1998:5-7).

The White Paper (DH, 1998) shifted social care from the rigorous privatisation agenda of the Conservative government to one that promoted public/private partnership and collaboration and, more importantly, it demonstrated a clear focus on the quality of services and outcomes for service users and their families. In addition, it set out a whole range of principles and initiatives that would be needed to achieve the 'Third Way' (Mitchell, 2000) and improve the quality of services. The White Paper (DH, 1998) also suggested the establishment of two statutory independent bodies, which were the Commission for Social Care Inspection created by the Health and Social Care (Community Health and Standards) Act 2003 and became fully operational on 1 April 2004 but this changed in 2009 to become the Care Quality Commission, and the General Social Care Council (GSCC). The GSCC was set up in 2001 further to the Care Standards Act 2000. The CSCI was an independent commission set up by the government to regulate all social care services in England. The GSCC established the Codes of Practice for social work and social care and is responsible for initial education and training in social work, and also the professional registration of qualified workers. The White Paper introduced a 'Best Value' regime in order to achieve improvements in management and performance. The 'Best Value' framework set an agenda for social services including performance indicators, local performance plans and reviews. Additionally, it gave power to the Secretary of State to intervene in cases of social services failure and to require certain local

authorities to accept external managerial assistance wherever they failed to implement the government goals (DH, 1998).

The New Labour welfare reforms, as outlined in the White Paper (DH, 1998), and subsequent law and policy documents such as the Local Government Act of 1999 and the Quality Strategy for Social Care of 2000 (DH, 2000), had a controversial impact on social services and social work in general (Jordan & Jordan, 2000). In addition, the top-down and authoritarian conception of policy implementation of these reforms was often criticised. Various commentators (Baldwin, 2002; Harris, 2003; Hill, 2000) criticised the approach followed by the Labour government in order to implement its principles. The notion promoted was that managers of organisations must exercise managerial control but also guard the government's political agenda. In contrast to the Conservative's managerialism, this agenda was about empowering everyone, service users in particular. Newman (2000) reported that this new kind of managerialism could empower citizens and communities, including the socially excluded, by modernising services to respond to users' needs and expectations.

Harris (2003) argued that modernising management requires continuous organisational and service improvement in addition to implementing business tools in the public sector services. The government had used strong political control, determined social work's objectives, and has monitored the results. Central government required local government and social care organisations to implement its agenda and carry out its policies. Targets and performance indicators were set for managers and front-line staff, in turn, was required to follow their managerial directives. Cree (2002) argued that modernising management of social services requires an extensive use of ICT in order to manage user data and control the workforce. However, it has been claimed that when ICT is used in this narrow context, explicitly to serve managerial purposes, it can have negative implications for social work practice (Tregeagle et al., 2008).

The changes introduced by the White Paper (DH, 1998) influenced thinking around information management, and created support for the introduction of advanced ICT applications in social care. Gathering information was a step towards acquiring knowledge about service users' needs, monitoring social services performance, and achieving management targets. However, no attention

was paid to how strategies for improvement would be integrated with better quality of services. Social workers delivering services under 'Third Way' were not sufficiently trained to absorb, in their working practice, the use of ICT to collect data or to translate it into information (Langan, 1998, 2000). Nor were social care organisations completely prepared to accommodate these revolutionary changes, because in terms of organisational structure and culture they remained the same. Zei et al., (2007) also reported that it was unusual for social care organisations to be required to adopt certain ICT applications in order to meet external targets e.g. programme performance evaluation. It was also not uncommon for organisations and social workers alike to view the use of ICT as a burden that interferes with their main tasks (Zei et al., 2007). The White Paper (DH, 1998) introduced a different view of how information management could be employed but neglected to address how this would be implemented as part of the organisational restructuring of social care organisations. The following discussion on framework strategy, Information for Social Care, meant to address this gap..

2.3 Information for Social Care

This section of the Chapter discusses the Information for Social Care (IfSC) (DH, 2001) policy guidance. A brief background of the use of ICT is first given followed by discussion of key areas focussed on that policy document. IfSC had a significant impact on social care organisations establishing the culture and the basic infrastructure of how organisations were expected to work on making E-government agenda a reality.

In the 1970s information systems were used for general financial and administrative purposes such as contribution records and family allowances (Bolitho & Smith, 1988). Then in the 1980s ICT was employed for keeping records with the aim of creating well-organized client record systems, which could be used by several departments in one local authority (Bolitho & Smith, 1998). Gradually the focus of social services developed and changed with more attention given to care in the community rather than in state institutions, its apotheosis took place with the implementation of the NHS and Community Care Act in 1990 (DH,

1990). This reorganisation demanded a more comprehensive use of ICT in order to manage resources effectively and deliver quality of social services (Glastonbury, 1993a).

In 2000 the DH recognised the increased needs of social services for information management and information technology in general. Various reports by the Audit Commission, the Social Services Inspectorate, and the Joint Reviews of social services departments had already highlighted the poor state of information and IT systems in local authorities' social care organisations. Working in collaboration with the Association of Directors of Social Services Information Management Group (ADSS, IMG) and representatives from a number of social services authorities, the DH began to develop a strategic framework that would help local authorities to make better use of information management in order to improve the quality of the services provided. An initial framework, Information for Social Care (DH, 2001), was launched for consultation in October 2000 and an updated version was released in May 2001. The fundamental goal of this agenda was to create an Electronic Social Care Record (ESCR) for social care (DH, 2003), which would enable each worker in social care to have immediate access to the relevant information about a client and particularly about the care and support they had received. ESCR also aimed to achieve integration of social care information in the implementation of NHS Care records services. The main thrust of the strategy was to provide encouragement to social services authorities in order to achieve improvements in information management in five key areas, consistent with the E-Government agenda:

- Putting the citizen or service user at the centre;
- Making appropriate information accessible in a suitable form for citizens, service users, and care providers;
- Creating openness and accountability to give confidence in information;
- Enabling information to be shared between partner agencies; and
- Supporting cultural change to ensure information is seen as a valuable resource (DH, 2001, p. 5).

To achieve the improvements indicated above, the key areas that needed to be addressed included:

- *Culture* which refers to the cultural changes organisations and their staff will need to make in order to respond to the changed expectations (DH, 2001: 14).
- *Knowledge Management* which refers to the means of managing the wide range of information and knowledge which is lost when staff leave the organisation (DH, 2001:16).
- *Planning and Project Management* which refers to the needs for managing projects by employing the PRINCE methodology (DH, 2001:24).

These key areas are discussed in more detail below.

Culture

The first key area of culture discussed in IfSC addressed the need for necessary changes in the working patterns of organisations and the adoption of new working types in order to embrace the technological and business changes required. Additionally, in order to respond to the information agenda organisations must develop their staff's information and knowledge handling skills. Great attention was paid to the interaction between the management of the social care organisations with other organisations such as health authorities and private sector agencies. The importance of establishing strong links with universities was also emphasised as to how this would enable social care organisations to benefit from research, and in exchange, universities gain from the knowledge held within social care organisations. Joint working and its advantages were also outlined with particular emphasis on sharing knowledge (DH, 2001:14).

In order to take forward this culture agenda, each organisation needed to plan and implement a Local Information Strategy, which was divided into four main parts: Information Strategy for Health, Information Strategies to Support Integrated Primary and Community Care, Information Strategy for Mental Health and Information Strategy for Children Services. The most challenging part of this

process for local authorities was to purchase and successfully implement an information management system able to put each of the above strategies into practice and to produce accurate information and reports for the DH. IfSC went as far as to identify the possible implications for senior managers and staff (managers, practitioners, and administrative staff), which for senior managers included the understanding of how to produce good service plans, policies, best value reviews, information strategies and E-Government strategies.

In contrast, the rest of the staff needed to be informed of technological developments and the role these would play in changing their functions within the organisation (DH, 2001:15). It was also clearly acknowledged that training and ICT awareness must be made paramount in order for the staff to understand the meaning of these developments (DH, 2001:15). Although the policy intentions could be characterised as progressive in terms of recognising the needs of organisations to share knowledge and work in partnership with other organisations, nevertheless they did not show how the changing working patterns of staff would achieve these ambitious plans and goals.

Knowledge Management

This key area acknowledged the fact that organisations fail to take the opportunity to collect the valuable knowledge that their staff obtain through their practice. So it was suggested that the employment of web technologies would assist towards managing the knowledge that staff take with them when they retire or change jobs. Technology was viewed as a tool for the sharing of knowledge across the organisation. There were also a number of initiatives outlined such as establishment of the Social Care Institute for Excellence (SCIE), inaugurated in 2001 to improve social care services. Specifically, SCIE aimed to identify and promote good practice and disseminate this to the social care workforce. It was recognised that the professional practice experience of the organisations' work was important but there were no explicit guidelines on how practitioners could use these initiatives to inform their practice and decision-making (DH, 2001:16-17).

Planning and Project Management

This key area addressed the need for effective management of IS and relevant resources. It was also stressed that the keys to successful project management were effective leadership, user involvement and a structured approach (DH, 2001:24). It was suggested that the implementation of a new IS required the utilisation of project management methodologies such as Projects in Controlled Environments (PRINCE). This methodology was produced in 1989 by the Central Computing and Telecommunications Agency (CCTA), a government agency for the development and implementation of IS/IT projects. PRINCE is a structured method for effective project management. It is a de facto standard used extensively by the UK Government and is widely recognised and used in the private sector, both in the UK and internationally. PRINCE2 (the method) is in the public domain, offering non-proprietorial best-practice guidance on project management. In the planning and project management section it was stated that: "The introduction of technology should not be seen as a project for technologists, but rather as a project that meets the needs of operational staff to improve the service that is provided" (DH, 2001:24). However, there was no mention of social work practitioners' involvement in the design of the suggested guidelines or of issues which the organisations needed to address regarding involvement of all possible stakeholders.

Taken as a whole the IfSC (DH, 2001) provided guidelines on how social care organisations ought to proceed with the implementation of MIS. One apparent gap was identified in the discussion of the approach organisations should follow to identify the information needs of their staff. Information needs in social care organisations are not the same across teams and individuals and instead they reflect the complicated combination of organisational requirements, the needs of service users and the different functions social work practitioners perform. In order to define information needs it is essential to study decision-makers as individuals and as members of a team. In the process of systems design the views of the systems end-user, i.e. social workers must be paramount – if organisations and management define the needs of individuals and teams then the risk is that the MIS will fail to meet the needs of end-users i.e. social workers. Besides as Humphries

[2] http://www.prince2.com/index.html

et al., 2002 argued using information systems in social work practice can meet organisational needs but is less likely to be able to take the unique situation of a service user into account.

Another important issue of the IfSC related to the implementation model refers to the "'top-down' policy implementation model as the dominant mode in the highly centralised UK (Hudson, 2005), with localities expected to respond to signals and instructions from the central government" (ibid. p.545). This may lead to the phenomenon of street-level bureaucracy identified by Lipsky (1980) where implementers of a new policy (usually front-line staff) can destroy a specific policy implementation if they do not take responsibility for it. When policy formation is separated from implementation then the risk of compromising a key policy objective is quite high (Hill et al., 2002).

2.4 Developments in Child Welfare Policy in Relation to ICT Implementation – The Green Paper Every Child Matters

The main focus of this section is to discuss the Green Paper's implications to the utilisation of ICT in social care organisations and social work practice. The Green Paper, Every Child Matters (ECM), (DfES, 2003), was the result of the Government's response Keeping Children Safe (DfES et al., 2003) to Lord Laming's Report into the death of Victoria Climbié (Lord Laming, 2003). The Green Paper was drafted to coincide with a response to the findings of Lord Laming's Report and a report by the Social Exclusion Unit (Bhabra et al., 2002) regarding raising the educational attainment of children in care. Its purpose was to use educational achievement as a vehicle to improve outcomes for children, young people, and their families. ECM launched a comprehensive system overhaul with the intention of creating clearer legal and administrative accountabilities in child protection (Rustin, 2004; DfES, 2004; Cooper, 2005; Rustin, 2005; Hudson, 2005).

In the context of ECM, it was maintained that the "common threads which led in each case to a failure to intervene early enough were poor co-ordination; a

failure to intervene early enough to share information; the absence of anyone with a strong sense of accountability; and frontline workers trying to cope with staff vacancies, poor management, and lack of effective training" (DfES, 2003:5). ECM identified five key "outcomes" which were central for all children, maintaining, that "children and young people have told us" that these five outcomes were the "key to wellbeing in childhood and later life" (DfES, 2003:4). Those were referred to as: "being healthy, staying safe, enjoying and achieving, making a positive contribution, and economic well-being" (DfES, 2003:6-7).

The publication of the Green Paper 'Every Child Matters' (DfES, 2003) and the passing into law of the Children Act in 2004 has been characterised as an important stage in thinking about children services in England and introducing a major era of reform and change (Parton, 2006, White et al., 2008). According to Parton (2006) ECM can be seen to build on much of the research and thinking which had become evident in the mid 1990s and which formed the basis of many of the policies introduced by the New Labour government in relation to children and childhood (Fawcett et al., 2004; Featherstone, 2004; Hendrick, 2003 cited in Parton, 2006).

In order to deliver the outcomes, a number of policy 'challenges' had to be dealt with and these were identified as a need for better prevention including: a stronger focus on parenting and families; earlier intervention; systems to address the "weak accountability and poor integration" of existing services; and workforce reform (DfES, 2003). Related to this approach, in September 2004, the government published the National Service Framework (NSF) for Children, Young People, and Maternity Services which sets out new standards able to improve the quality of children's health services (DoH, 2004). This was to be implemented over a ten year period and was devised to contribute to the achievement of the five outcomes.

The key recommendation of the ECM regarding the sharing of information about children emphasised that professionals from different agencies must share notes on cases and highlight concerns to other professionals. Although this sounded like a great idea to bridge the information gaps, it was also an ambitious plan, easier to conceptualize than to operationalise. The Green Paper did not specify how this plan was to be implemented in terms of technology products and

systems (Clark, 2003). The task of purchasing the necessary technology to build the databases and the information systems was left with the local authorities and whose main concern was the financial cost. There were also worries about data quality and the professionals' training for using IS (Clark, 2003). There were serious concerns as to whether the data input would be of an appropriate quality as the workforce would need extensive training to be able to use the databases and input the accurate and specific data needed. They would also need strong analytical and evaluative skills in order to appreciate which are the most important pieces of information to be put into a database, and which to leave out.

Poor exchange of information was among the key weaknesses in agencies' handling the case of Victoria Climbié as highlighted by Laming's inquiry. In addition, it had appeared to be one of the most serious failures in other child death inquiries and reports (SSI, 2002; Garett, 2003; Rustin, 2004). One goal of Every Child Matters was to improve the sharing of information across agencies so that information regarding children's needs was up to date and consistent. It sought to make such information sharing the norm and to remove any barriers (Reid, 2005). Agencies were to improve information sharing and ensure that all local authorities have a list of children in their area, the services each child had had contact with, and the contact details of the relevant professionals who worked with them. This was to be facilitated by the Government removal of the legislative barriers to promote information sharing, as well as the technical barriers to electronic information sharing through developing a single unique identity number, and common data standards in the recording of information. In addition, the development of a Common Assessment Framework (CAF) across services for children, including special educational needs, Connexions, Youth Offending Teams, health, and social services would assist such information-sharing, as well as reducing duplication.

The databases of child information were to include "basic details," which actually consisted of a wide range of information. Clearly, these goals could not be met without proper implementation of information systems. The Deloitte Corporation developed "RYOGENS," a "simple, practical information sharing tool to enable local cross-agency practitioners to share concerns in order to identify and assess vulnerable young people" (Garrett, 2005:540). RYOGENS was considered

a “cost-effective and immediately applicable technical solution” (ibid p. 540). The implementation of this software was a direct application of technology to make manifest the principles and practices embodied in Every Child Matters.

Following Laming’s recommendation, ECM proposed the creation of an electronic file for every child in the country (it was expected to include around eleven million children in England and Wales), called Information Sharing and Assessment (ISA). The ISA initiative consisted of three main elements. The first was the development of a database on all children, intended to be accessible to all the related agencies in the child protection field (social services, health, education, police, etc.). These files would be stored in a database creating a framework for information sharing among professional groups. The main purpose was to identify and keep track of those children at risk from abuse, neglect, school exclusion, offending, and social exclusion. Professionals could enter their contact with any child, provide their own contact details, and ‘flag’ a concern in case they have any concern about a child’s health or development. The plan was that this database, in relation to the Common Assessment Framework (CAF) and Integrated Children’s System (ICS), would improve the sharing of information among agencies and professionals in the field (White et al., 2009). The database had been piloted in a number of ‘trailblazer’ authorities. The planned national version was known as ContactPoint aimed at the creation of national standards for information sharing amongst local public services; and, developing local protocols to support the sharing of information about the development, circumstances and/or behaviours of children and young people (see http://www.everychildmatters.gov.uk/deliveringservices/contactpoint).

The second element of the ISA is the Common Assessment Framework (CAF) – a standard assessment tool to be used by all professionals working with children for assessment and referral, and which can be e-enabled. The child and parent can make comments and indicate consent to share information. The CAF was completed as a Word template or on-line, and passed to other professionals as a standard assessment and/or referral form. It is difficult to overstate the aims of the CAF. It is hailed as a needs-led, evidence-based tool which will promote uniformity, ensure appropriate ‘early intervention’, reduce referral rates to local authority children’s services and lead to the evolution of ‘a common language’

amongst child welfare professionals (e.g. Warren House Group, Dartington Social Research Unit, 2004).

A third aspect was the role of the Lead Professional, who co-ordinated the work of all services involved with a family. This was also subject to a pilot study. An additional major initiative rolled out nationally was the Integrated Children's System (ICS). The ICS is intended to provide an electronic record of professionals' involvement with children from first contact to case closure. The CAF was likely to feed the ICS by providing initial information and greatly facilitate early planning and intervention.

The ICS 'provides a conceptual framework, a method of practice and a business process to support practitioners and managers in undertaking the key tasks of assessment, planning, intervention and review…. It aims to help them do this 'in a systematic manner, and to enable practitioners and managers to collect and use information systematically, efficiently and effectively' ('About the Integrated Children's System' Every Child Matters Homepage, Department of Children, Schools and Families). It was intended to apply to all children in need in England and Wales—about 370,000 at any one time—and not only 'looked after' children (about 60,000) or those on nationally required and locally maintained 'child protection registers' (about 26,000) (Shaw et al., 2009a). The ICS was intended to lie at the heart of statutory child-care practice in England and Wales. There has never been a nationally provided ICS system, but rather a number of systems being implemented, ranging from those developed 'in-house' to those purchased from commercial suppliers, through locally agreed business solutions (Shaw et al., 2009c). The key elements of the ICS were:

- An understanding of social work as consisting of assessment, planning, intervention and review;
- A set of data requirements providing common information from one locality to the other about children and families;
- A set of 'exemplar' formats for social work practitioners and other agencies, which form the basis for an e-social care record.

White et al., (2009) claimed that despite a strong emphasis on multidisciplinary working and an expectation that professionals across the

children's workforce would engage with these developments, it was discovered that private, and voluntary agencies in particular, have been slower to take up and use the CAF (White et al., 2009:1105). As a common problem identified was the particular difficulties of access to appropriate ICT facilities by such groups. Inevitably, the success of a multi-agency implementation of the initiative was challenged by the size and diversity of the children's workforce and the complexities of dealing with large numbers of organizations with different policies, procedures, practices and status. Such a large whole-system approach was susceptible to both resistance and local differences in interpretation and usage. In short, in the Trailblazer sites, there was little that was 'common' about the use of the CAF (White et al., 2009:1105).

White et al., (2009:1114) concluded that the CAF constrained professional practice because it was designed to exert its own "descriptive demands" which were meant to help and inform professional practice but were tyrannical to those who have to complete the forms. The same theme was identified by Shaw et al., (2009) in their evaluation of ICS. The extent of form-filling and ticking boxes had been a major issue in the process of implementing ICS. According to the literature on information systems implementation successful implementation and proper utilisation of the system requires user involvement and user acceptance of the system and its functions (Russo, 2001). White (2009) addressed the imperfections of information-sharing practices and noted that information must be shared more honestly, accurately, and efficiently.

White (2008a) also has written about the controversy regarding the new ICS. White (2008a) believed the new ICS hindered the protection of children rather than promoted it. Onerous workflows and forms of the new ICS have only created more difficulties (White, 2008). For example, White (2008b) reported that: "Social workers are acutely concerned with performance targets, such as moving the cases flashing in red on their screens into the next phase of the workflow within the timescale. Switching off the flashing red light bears no relationship to protecting a child. That is something of which social workers and managers are acutely aware, but slippages carry sanctions." White (2008a) asserted that investment in technology was essential, but that several aspects of the ICS needed to be re-

evaluated and adjusted so that outcomes were those that were intended and not those that were consequential yet detrimental.

Other key issues raised by Munro (2005), such as who will have access to the database, who will get the permission to add or modify information, who will manage it, and whether the system will operate at local, regional, or national level, remained unclear. Munro (2005) identified a number of difficulties that can arise when someone attempts to find the most appropriate information. The agency files already contained a lot of general information related to a case which made it difficult to locate, identify and interpret the available information and understand it correctly, an issue already underlined in previous inquiries (Munro, 1998). In addition, other technical problems may arise. For example, local authorities could develop or use a variety of databases and operating systems. The new database also needed to "communicate" and/or "be fed" with the existing diverse systems such as the child protection register and NHS records. Furthermore, the estimated cost of implementing the database nationwide had not been addressed. The cost of the NHS database, for instance, increased at least three times between 2002 and 2004 (Collins, 2004) which suggested that the Government has not got a good record for accurate cost estimations of ICT schemes (Munro, 2005).

ECM's recommendations (DfES, 2003) fostered an attitude of progressively more employment of ICT in social care. However, they did not facilitate the role of the social worker as the principal stakeholder when using and obtaining results from IS. Although there was a strong belief that information sharing would reduce the failures to protect children, it ignored two main factors: first the need to support local authority funding to acquire the necessary technological infrastructure, and second the need to support the workforce to respond effectively to this challenge. Shaw et al., (2009a) in their evaluation of ICS reported that practitioners felt that: "the ICS took up time that would be better spent with their clients and were very critical of it" (ibid p.619). It was also claimed by Shaw et al., (2009a) that the problems with ICS identified by social workers in the study were not correlated with the lack of knowledge of the use of computers or of the IS itself but rather with the lack of ownership by social workers of the IS. However, "there was a positive difference where the system had been tailored locally with

social work staff engaged in the process from initiation to implementation" (ibid p.621).

Nevertheless Baldwin (2000) argued that policy is bound to create tensions and resistance when it is implemented from the top of the management and determined by governmental regulations without taking into account those at the bottom who put that policy in use in their daily practice. In contrast, policy which is implemented with extensive consultation and advice from all the key stakeholders and which is responsive to front-line feedback travelling back up the hierarchy to inform subsequent policy, has a better chance of being employed effectively. As a result it could be argued that the top-down policy implementation model (Gould, 1996a, Baldwin, 2000), combined with top-down financial control, limits a social care organisation's autonomy and consequently innovative practice.

Because of the high media, public and political opprobrium arising from the death of Victoria Climbié and the need for the government to be seen to be actively responding to the Laming Report, the government was provided with an ideal opportunity for introducing wide-ranging and radical changes. The combination of wanting to introduce changes which would both broaden the scope of prevention while trying to reduce the chances of a child dying in tragic circumstances such as those suffered by Victoria Climbié meant that the role of the State would become broader, more interventive and regulatory at the same time.

2.5 Conclusions

This Chapter has presented the policy context with relation to the implementation of ICT in social care. Two major pieces of policy development for social care, the White Paper Modernising Social Services: Promoting Independence; Improving Protection; Raising Standards of 1998 (DH, 1998) and the Green Paper 'Every Child Matters' (DfES, 2003), both initiated by the New Labour government of Tony Blair, were discussed in relation to ICT implementation in social care organisations. The initial framework strategy, Information for Social Care (IfSC), (DH, 2001) was also analysed in terms of providing the basis for ICT utilisation in social care organisations. The discussion

of the policy context was combined with research evidence in an attempt to identify issues and themes, which assisted in better understanding of ICT implementation within social care organisations.

Throughout the New Labour administration the policy context was connected by some common characteristics such as the employment orientation of its welfare programmes, the continuing preoccupation with public sector privatisation, inspections, audits, standards and so on (Penna, 2003). It is important to note that in order to appraise the effects of policy on social care organisations it is essential to consider the New Labour's modernisation project within the general socio-economic and political context, as it was modified and influenced by the UK's membership in organisations such as the European Union, for instance. Thus, in this complicated context it is considered essential to review how social work practice and social work practitioners were affected by the implementation of policy initiatives which introduced the use of ICT into every aspect of social work practice, intake and to assessment, intervention and evaluation. As it has already been mentioned, ICT utilisation both in the public and the private sector improved workers' time and abilities. It offered opportunities for effectiveness and efficiency to be achieved within time restrictions. However, it felt that social work became more bureaucratic than ever, more business-oriented and less client-oriented (Mithran, 2006). Additionally, Parrot et al., (2008) highlighted the risk of transforming social work from a professional activity to a centrally controlled technical and administrative task. Similarly, social workers it was stated that spent more time as admin staff in front on their PCs rather than with clients (White, 2008).

An additional theme important to policy implementation and identified by commentators was the involvement of social work practitioners as end-users of the electronic systems in design of the systems (Munro, 2004; Burton et al., 2008; Carrilio, 2008; White et al., 2008). The policy for social care was developed within the context of new public management, which embodies an abundance of processes, procedures, monitoring and auditing systems. As a result senior administrators rather than social workers are more influential in designing and applying information systems. Furthermore, studies such as Dearman's (2005) have shown that management attention did not extend to issues of social work

practitioners' involvement or addressing the additional skill needed and the higher workloads the introduction of new technological tools might create, at least initially, in the implementation process.

Social work practice could not remain unaffected by the new technological applications designed to lead to major organisational changes (Schoech et al., 2002, Schoech, 2002). First, the descriptive report-writing by social workers had to change in order for records to be electronic and data to be translated into useful information. Secondly, the time spent with the client was reduced in order for the practitioners to be able to have time to work on the computer. Finally, the professional discretion of social workers was decreased as a result of top-down decision-making over a short time prescribing the use of forms and tick boxes, which do not allow the professional to think critically. Professional discretion was also affected when more standardised forms of practice are introduced that require a certain format for reporting a case. Social work practitioners have reported feeling controlled in their work by their managers (White et al., 2008, Shaw et al., 2009).

An explanation given for the increased control over social workers' practice is to increase their accountability (Carrilio, 2008). Social workers were and always will be accountable to their clients first and then to their organisation, as stated in the Code of Ethics (British Association of Social Workers, 2003). However, according to Burton et al., (2008) ICT have been focused on auditing and cross-checking professional behaviour, rather than facilitating more vigorous involvement of social workers in the services that they themselves provide (ibid. 2008).

Looking back on the policy developments analysed above it is apparent that since the election of the New Labour government in 1997 social policy and child protection in particular have made a great shift towards exploring and utilising ICT in professionals practice. Through the years this thesis has taken to be completed one could observe the process of introducing innovative practices as well as managerialist methods and approaches. The evolution of statutory social services within the first decade of the 21st century into social care organisations with advanced IS and MIS was not without difficulties. The changes initiated with ISA for example in child protection have an important impact on social work

practice as such and the protection of vulnerable groups in particular. On the one hand it could be argued that the introduction of advanced ICT applications served only the aims of the Value for Money Agenda of 3E's - Economy, Efficiency and Effectiveness in social care while on the other hand they were necessary in order to ensure quality of service users' protection.

These points identified will be returned to later in the more detailed discussion of the empirical findings of the thesis in Chapters 5, 6, 7 and 8. In the next section, Chapter 3, the literature review will explore MIS implementation within social care organisations. It will also examine the types of social care organisations and the aspects of organisational change following the MIS implementation.

CHAPTER 3: Implementing Management Information Systems in Social Care Organisations

3.1 Introduction

This Chapter reviews relevant literature to determine what lessons have been learned from centrally mandated and supported IS for social care organisations and in particular seeks to understand the process of MIS implementation in social care organisations in England as well as to study the positive or negative parameters, which may or may not assist the process.

Several themes emerged from the legislation review previously that must be considered when setting the groundwork for analysing the impact of MIS implementation on social care organisations. These include the following: management in social care organisations, staff resistance, centralization and decentralisation of decision-making, and political and bureaucratic forces. In order to better understand these themes and how they influenced MIS implementation the Chapter starts by discussing the management of social care organisations in relation to ICT utilisation; then the discussion on how social care organisations affect MIS implementation follows and vice versa and finally the Chapter discusses empirical findings from literature on MIS implementation in social care organisations.

3.2 Management of Social Care Organisations

Traditionally social care organisations are considered as bureaucratic organisations with characteristics based on the classical model of organisational management (Seden, 2003). The classical model of management theory includes two major schools of thought, the bureaucratic model and the scientific management approach. The key assumption of the classical model was that organisations are rational systems and can be planned and blueprinted much like a machine. For this reason, it has been termed “machine theory” (Neugeboren, 1985:41). This model was based on the concept of what an ideal organisation should be rather than on the study of organisations and their actual functioning. In

the following pages the model is discussed in relation to social care organisations and more specifically the impact it might have on MIS implementation in social care organisations.

The bureaucratic model stressed the relationship between legitimated authority and control. A relationship derived from the assumption that people in superior positions who have authority also have ability. Max Weber created five characteristics for modern systems of bureaucracy, derived from the idea of rational/legal authority, which determine the interrelationships between management and employees (Hughes, 1994):

1. System of rules
2. The presence of a hierarchy
3. Exclusion of personal considerations
4. Knowledge base
5. Sphere of competence

A coherent hierarchically bureaucratic model has its advantages and disadvantages for social care organisations. As a rule, bureaucracy offers clear lines of command, coherence, and predictable rules. Butcher (2000) also added to this list the virtues of consistency, reliability and susceptibility to political control. It was also argued that these made an organisation responsive to its clients as well as to its personnel (ibid. 2000). Coulshed and Mullender (2001) recognised three significant disadvantages of the bureaucratic model for social care organisations. These are summarised as follows:

“Bureaucracy is best suited to routine, stable, and unchanging tasks”. Coulshed and Mullender, (2001:31) argued that this is in conflict with the unpredictability of social work. Social care personnel in their everyday routine deal with diverse client groups and individual needs.

“Another complication in fitting social work into a rigid organisational structure is the vexed question of professional rules” (Coulshed & Mullender, 2001:31). A social worker cannot implement the same rules for each individual. The social worker is acting differently in each case, which means that it is difficult to follow a set of rules. Social workers must act freely bearing in mind the over-

arching principles and ethical code of the profession as well as the organisation's purposes. Social workers exercise their professional discretion according to their client's needs.

"The more diverse an organisation's activities are and the more types of people it serves, the greater the complexity required in the shape that holds everything together" (Coulshed & Mullender, 2001:31). It is well known that human services are the most complex ones in the public sector (Challis, 1990, Harlow & Lawler, 2000) and that complication is derived from many sources. One source of this complexity is the increased need for non-social work personnel and technical specialists to advise the whole organisation or organisational activities, such as computing, legal or equality issues. These circumstances make it hard for a manager to include such a variety of experts under a specific set of rules.

James (1994) argued that the utilisation of a production system in social care organisations had major, though unintentional, negative consequences for service users. Firstly, service users became "raw material" and were categorised regarding their physical or mental condition into large groups of service users to be dealt with at the discretion of the system. This meant that the fundamental principles of social work of respect for Human Rights and safeguarding service users' dignity and individuality are vulnerable to being transgressed or ignored. James (1994:48) noted that:

> "Files were opened and case numbers were allocated for each user. Users at once became unequal; something was done to them rather than with them…"

It could be argued that the bureaucratic model with its clear lines of command and a vertical hierarchy represents a non-participative model of decision-making especially for those in the lower lines of the hierarchy. In contrast, a social care organisation's communication requirements are quite high. Practitioners need to have access to information for decision-making related to their work and to participate in consultation when new policies are planned. The virtues the bureaucratic model demonstrates such as consistency, reliability and susceptibility to political control are not sufficient to facilitate a social care organisation's management. Equally, one could argue that the implementation of ICT systems in a bureaucratic context where staff needs are not represented and

only management needs are taken into consideration, cannot lead to successful implementation (Beirne et al., 1998).

The location of social care organisations within a bureaucratic context has always generated tension and debate about the dangers of deskilling professionals, separating the manager from the practitioner and issues about power and control between manager and worker (James, 1994; Adams, 1998; Izod, 2003). The restructuring of local authority and social services in the 1970s (Local Authorities Social Services Act 1970 and Local Government Act 1972) was associated with the idea of social services as productive machines. More specifically, the Seebohm Report (1968) was heir to a departmental organisation with its roots in Taylorism, based on the assumption that social services are extensions of the machine i.e. central government; comparable to extensions in the production lines of Henry Ford's vast automobile industry rather than being founded on the complexities of meeting human needs in a service-based organisation (James, 1994:47).

In the scientific management model the organisation is concerned with continuous processing and mass production. It has a top-down approach to planning, monitoring and controlling the work of others in its span of control (Hafford-Letchfield, 2006). The care management process and performance management systems have been identified as systems, which emphasise efficiency in the style of scientific management, relying mainly on objective numerical measurement (Coulshed & Mullender, 2001; Munroe, 2004).

Scientific management theory viewed organisations as efficient machines geared towards attaining specific goals (Hasenfeld, 2000). This model supported the importance of the physical capabilities of people in organisations and therefore focused on the time and motion required for individuals to perform certain tasks.

This engineering approach has its roots in Taylor's scientific management and what has been labelled Fordism after Henry Ford's innovations in mass production. According to Hughes (1994) Taylor's 'scientific management' involves, i) time-and-motion studies to decide a standard for working, ii) a wage-incentive system that was a modification of the piecework method already in existence, and iii) changing the functional organisation. According to Coulshed and Mullender (2001) Taylor was interested on how management techniques could

influence the workers to work consistently at maximum efficiency. Thus, the purpose of management was to produce a highly efficient and effective service delivery system that is governed by norms of rationality. It could be concluded that Taylor's main notion to treat workers as cogs in a machine did not allow any attempt for innovation and individual initiative.

In this model, decision-making was economy-oriented and as a result organisational structure did not facilitate the processes of sense-making and interpretative interactions by organisational factors (Pfeffer, 1997). Reed (1996) argued that the scientific management model justified the concentration of power in large organisations and the hierarchical authority of a managerial class. In management structures of this kind, professional discretion was significantly reduced. According to Harris (2002) this was also observed with social work practitioners' professional discretion as they had to report before they act and follow the hierarchical lines of command.

Capra (2000) also suggested that the organisational structure of a mechanistic system of managing organisations cannot be effective as it hinders rather than facilitates management and practice. In social care organisations which operate in a hierarchical mode in relation to staff's specific tasks and skills, there is only a low possibility that they will be able to effectively accommodate such processes as ICT implementation, especially advanced applications such as MIS. Information technology and its tools have always been approached as imposing constraints on practitioner's work with clients rather than as a tool for improving practice and services (Sapey, 1997; Harris, 2003). Imposed from central government in order to collect data and report back, MIS was regarded as an extension of managerialist tools introduced to reduce practitioners' discretion. Therefore, it can be argued that ICT has been used mainly for managerial purposes without taking the needs of front-line staff into account. It had been employed to reduce professional power with the use of a 'tick- box culture' and to limit further the practitioners' discretion (Harris, 2003).

3.3 Impact of Social Care Organisations on MIS Implementation

This section explores the possible impact of social care organisations on MIS implementation based on literature derived from organisational theory and management of organisations in general in an attempt to understand social care organisations' behaviour towards MIS. The adoption of information systems in organisations has been growing at a rapid pace. The use of technology has evolved from the automation of structured processes to systems that are truly evolutionary because they introduce change into fundamental organisational procedures. Thus, the development of IS has had a tremendous impact on organisations during previous decades. New information systems have been introduced and the effects of them are both positive and negative. The management of IS in organisations is considered a very challenging task because too often implementation of a new IS fails mainly because the relations between IS and its organisational context are complex. The theoretical understanding of these relations and phenomena need to be wider, especially for organisations with special features like social care organisations.

Organisations and information technology, as the figure below shows, share a common space and have similar goals. These similarities are found at the level of knowledge. In order to achieve a goal, either organisational or technological, the two factors must cooperate by combining elements of their distinctive knowledge.

Organization and technology must share knowledge.

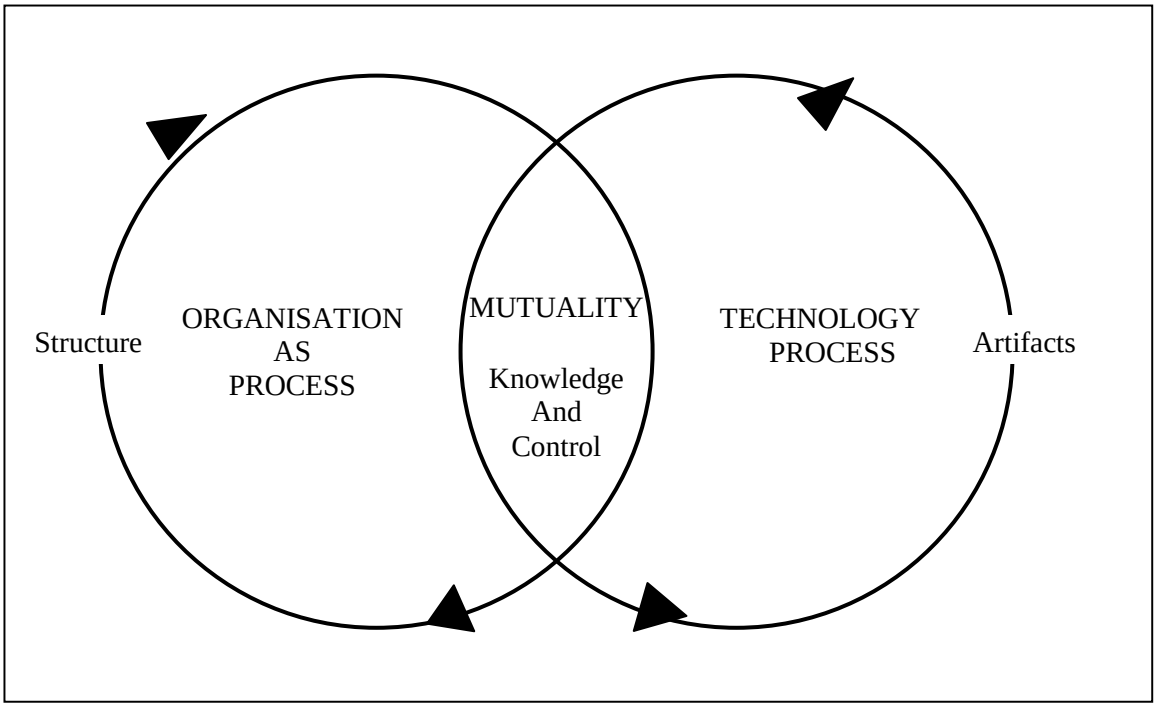

Figure 3.1: Organisation and Technology, adapted from Scarbrough and Corbett

Harrington (1991) categorised organisations with respect to ICT differently. Firstly, the mechanistic view of organisations includes the Weberian bureaucracy and Fordist approaches to management. As it has already been discussed, these approaches considered organisations as machines, which operated according to certain tasks and goals and were determined and predictable. In this context as far as MIS is concerned they are considered only to be a management tool. Harrington (1991:55) stated that: "There is no relationship between a structure and its technology because neither is seen as a social process but rather as building blocks for management use". Additionally, as this set of approaches have an economic foundation it was logical to perceive technology as just another tool or resource, which managers must decide whether or not they need to use. Either way how ICT evolve in any particular organisation is in the hands of management and not in the hands of the staff.

Secondly, Capra (2000) referred to organisations as organisms. Within this perspective, organisations were perceived as complex, living entities that do not have machine-like qualities. A living organism interacts with the animate and inanimate forces in its environment and in the same way an organisation consists of individuals and social forces, which compete and contradict each other. Technology, as one of these elements, cannot be considered as just a tool or be thought of as so predictable.

The third and final category of perspectives in organisational theory recognized organisations as processes. According to Harrington (1991) the structure of the organisation was a consequence of human behaviour. The demonstration of such behaviour was found within organisational processes. The process or open-system approach paid more attention to the functioning of the elements than to the design of the organisations. Thus, technology was considered as a process in its own right, determining the perceptions of individuals and affecting their behaviour. In addition, technology was considered a behavioural phenomenon and its impact was interpreted with respect to the consequences it had upon its users. Ultimately, its management was more appropriate when it was directed towards user's behaviour.

From the work of Elton Mayo (1933) and other human relations scholars a new approach arose, which analysed a different variable in relation to

implementation of technological systems, this variable being the workforce. The structure of an organisation is believed to be the result of the interaction between the workforce and its technology. This approach became known as contingency theory (Burrell and Morgan, 1979; Donaldson, 2001). Harrington (1991) suggested that the implication of these ideas for the management of technology was that its ownership must lie in the hands of the workforce. Moreover, management owned only one part, the machinery, and most importantly had only indirect control over technology.

Organisations have a direct impact on MIS by deciding how the technology will be used and what role it will have within the organisation. From the isolated 'electronic machines' with limited functions in the 1950s, organisations have now reached the era of networked organisation where a large central mainframe computer stores information in the same way as a library and coordinates information flowing among desktops and perhaps to hundreds of smaller local networks (Tighe, 1993). These networks can be connected to the entire organisation or linked to external networks, including the Internet. Although organisations have the option of selecting the quantity and the quality of technology to be used, they are critically dependent on systems and could not survive even an occasional breakdown.

Additionally, organisations affect MIS through decisions about who will design, build, and operate the technology within the organisation. Information systems in general require a package of services and people, such as specialised organisational subunits, information specialists and supportive groups. Nevertheless, it is managers who make the final decisions about the computer package, which means how technology will be delivered, and by whom, how, and when. Therefore, it is entirely up to the organisations' managers to decide which system will be adopted and how it will be used.

Organisations affect information systems simply because they can choose whether or not to build information systems. As Laudon and Laudon (1996) argued, managers provided the public and private rationales for building information systems. Managers could choose to use systems primarily to achieve effectiveness and efficiency, in other words to achieve better economic outcomes. The impact of organisations on IS depends mostly on how managers make

decisions. Additionally, improvements in decision-making (speed, accuracy and comprehensiveness) are vital in improving service to the clients, complying with governmental reporting regulations and exercising more control and coordination over individuals and groups.

Laudon and Laudon (1996) also asserted that some organisations were simply more innovative than others. They had values that encourage any kind of innovation, regardless of its direct economic implications. In other cases, MIS were used because of the ambitions of various groups and the anticipated effect on existing organisational conflicts. In the case of social care organisations, it is governmental regulations that promote changes in organisations through the adoption of a computer system. Finally, it is essential to categorise the external-environmental and internal-institutional factors, which influence the adoption of an MIS in organisations and illustrate why organisations adopt systems.

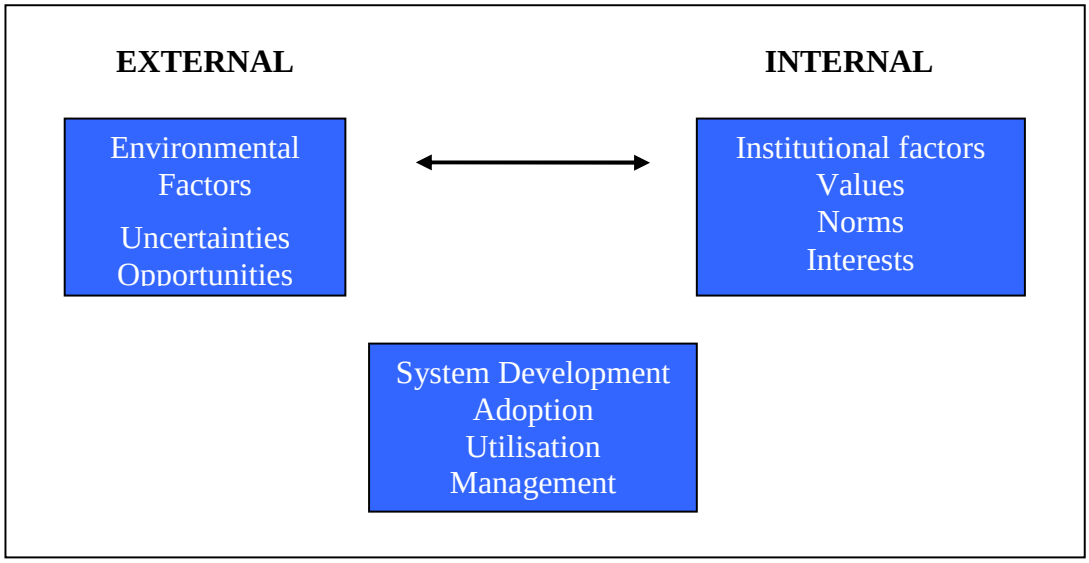

Figure 3.2: Factors influencing IS development in organisations, adapted by Laudon and Laudon (1996)

According to Laudon and Laudon (1996) as the Figure 3.2 shows, environmental factors are those that are external to the organisation and influence the adoption and design of MIS. Some external factors can be the rising costs of services, products or salaries and governmental changes or initiatives. On the one hand, these factors can be considered as environmental constraints. At the same time, the environment also provides opportunities, for example, new technologies or a new governmental programme that increases the demand for certain services

or products. On the other hand, Laudon and Laudon (1996) described institutional factors as those that influenced the adoption and design of MIS, and that were internal to the organisation. They included values, norms and interests that direct matters of great importance to the organisation. For example, the managers of a finance department decide to develop an MIS in order to exercise more control over financial procedures in the whole of the organisation. The resulting system is adopted, developed and operated for purely internal reasons.

Another important structural factor is an organisation's personnel. According to Markus (2002) personnel factors become factors of resistance in ICT utilisation: "When people factors such as human nature, cognitive styles or personality traits are incompatible with the requirements of a computerized information system, people will resist its utilisation" (Markus, 2002:21). In social care organisations resistance to MIS may be linked to the standards of confidentiality and privacy that are stressed in the social work profession. Social workers fear that MIS may increase the possibility of private information being improperly shared with others. Byrnes and Johnson (1981) attributed this fear to poor managerial abilities within the organisations. In addition to fear of privacy violations, social workers tend to resist widespread monitoring of their practice. This stems from the core of social work that calls for the relationship between the practitioner and the client to be the key change agent. Monitoring of this relationship can be seen as an intrusion into the therapeutic process. Furthermore, in social care organisations where governmental laws, rules and funding systems dictate what services are provided, the social worker fears accountability for outcomes that are beyond their control.

According to Argyris (1990) the reasons behind the implementation gap of MIS were located in the inadequacy of information systems rather than in the organisation's inability to 'detect and correct error'. Argyris (1990) also stated that most organisations create MIS, which are designed for single-loop learning, which then suppresses double-loop learning. As a result, organisations are not able to disseminate results and provide feedback and consequently learn or create knowledge. The next section discusses the impact a MIS could have on social care organisations.

3.4 Impact of MIS Implementation on Social Care Organisations

This section is concerned with the impact of MIS implementation on organisations. For the aims of the thesis it is essential to understand the positive and negative effects on organisations, at a group and individual level. Additionally, it explores factors, which influence how organisations decide which system to adopt and develop. The origins of research into Information Systems in organisations arises from a fundamental concern about how new and unknown technologies are to be understood, evaluated and employed to engender productivity within organisations (Avgerou, 1998; Whitley, 2004). Information systems in social care have been a part of central government investment for nearly three decades. Most of these systems are developed by governmental organisations with funding and guidelines provided by the central government. A recent example is the Integrated Children's System (ICS) developed to support effective practice with children and families and improve decision making and planning for children in need by the Department of Health and the Department of Education and Schools (Cleaver et al., 2008).

The introduction of MIS in an organisation is an innovation that has the potential to disturb the functioning of the organisation. This can take the form of intended and unintended effects, which means that some of them may have been predicted and incorporated into the design, but not others (Beynon-Davies, 2002). At the same time these effects can be positive or negative. For example, one activity system may be affected negatively in terms of effective operation. In contrast, another system may result in a significant improvement in efficiency of the organisation. The impact of a MIS can also be considered on a number of levels: the organisation as a whole, stakeholder groups within the organisation and even at the level of individuals.

Information systems are introduced to organisations with the overall purpose of improving effectiveness and efficiency (Beynon-Davies, 2002). However, efficiency and effectiveness cannot be delivered by the MIS itself. MIS can initiate changes in organisational structure and operation and enable human systems to achieve them. From this point of view, MIS can be considered effective and efficient. It is efficient when it helps the organisation to achieve more with the same resources or the same with fewer resources, and effective when it assists the

organisation in delivering products or services of higher quality. MIS can also enrich jobs and enhance job satisfaction (Beynon-Davies, 2002). MIS can be employed in order to remove administrative activities such as paperwork or record keeping, which hinder staff's ability to be really effective. These activities consume personnel time. Information is also more accessible and can be used by staff of a lower grade to allow them to make decisions on clients. Generally, MIS assist professionals at all levels to be more organised in their work and more effective in their relationship with the client-system, which is very important in terms of achieving organisational goals (Beynon-Davies, 2002).

Beynon-Davies (2002) found that it was also an advantage of MIS that they make work more visible. For example, personnel have the opportunity to establish what is happening in their daily work more clearly and to identify problems and suggest alternative options. This is again a consequence of the flow and use of information within groups and processes. Thus, Brown (2000) suggested that information systems had significant potential as vehicles for learning in organisations. This was also argued by Laudon and Laudon (1996) who thought that information systems can help organisations achieve great efficiencies by automating parts of managerial or operational processes or by assisting organisations to rethink and streamline these processes through the development of workflow software.

Heeks and Bhatnagar (2000) referred to the negative side of implementing IS in organisations. The negative effects are caused, not by the IS itself but rather by its interactions with the human activity systems of an organisation. The forms of these effects were described as follows:

1. *Upskilling/deskilling*. Information systems can increase the levels of skills (upskilling) required in a particular work or decrease that level (deskilling).
2. *Task variety*. Information systems can increase or diminish the variety of tasks required of the worker.
3. *Task scope*. Information systems can be used to add to or reduce the size of the task relative to the overall purpose of the organisation.
4. *Autonomy*. Information systems can be designed to increase the autonomy of employees in the sense that they are given responsibility for planning

and controlling their own work. Alternatively, IS can be designed to control, sometimes in minute detail, the everyday work of personnel.

5. *Social interaction.* Information systems can be designed to encourage social interaction between workers or to decrease levels of social interaction.

An additional issue raised by Harrington (1991), in terms of changes after MIS implementation, is the split in the organisational structure. This split is between the IT people or the technicians (people knowledgeable about computing and information technology), and the users (people who use the facilities but generally do not fully understand them). Such a dichotomy, which was both perceptual and physical, had caused considerable problems for organisations because computer systems undermine the organisational structure by creating centres of power not in keeping with established control. This phenomenon was very often observed in social care organisations as well (Fean, 1996; Kerslake, 1996). The imbalance in an organisation's three elements (information system, organisational structure, and political processes) results in a lack of managerial control over technology, the creation of a three-way power split between management, user and technician, and an increasing alienation between employee and the work process.

3.5 Social Care Organisations and Information Systems: Findings from Empirical Literature

This section elaborates the findings from research and theoretical contributions in order to address MIS's developments in social care organisations. Over the course of the last two decades there has been a significant amount of interest in the development and implementation of information systems in social care organisations (Murphy and Pardeck, 1988; Glastonbury, 1993; Gould, 1995; Steyaert, 1996; Sapey, 1995 and 1997; Harlow and Webb, 2003; Garret, 2005). That interest has had two main forms of expression. It was expressed either in the impact of MIS on service delivery and on social work as a profession, or in the

way MIS are implemented and the relationship of social care staff with IS. Recently, an example of research, carried out by White (2008a) showed that the computerised Integrated Children's System being rolled out across the country is unfit for purpose and takes social workers away from face to face work with clients: "Social workers report spending between 60 percent and 80 percent of their time at the computer screen" (ibid:2008a).

In the 1970s information systems in social care organisations were used for general financial and administrative purposes such as contribution records and family allowances. Then in the 1980s IS was employed for keeping records with the aim of creating a well-organized client record system, which could be

Several reorganisation initiatives including the Local Authorities Act 1970 and more recently new structures such as Children's Trusts introduced by The Children Act 2004 have changed the social care organizational structure. The governmental intention was to adjust by computerisation the refocused social care organisations information systems for use by the upper levels of management rather than by the lower operational levels of management. This reorganisation demanded a more comprehensive use of IS in order to manage resources effectively and deliver the quality of social care organisations (Glastonbury, 1993).

Barnes (1996) in an analysis of surveys of Society of Information Technology Managers (SOCITM) from 1992 up to 1996, reported a continuous increase of IS use in social services by managers and social workers alike. For example, the 1996 survey reports that 73.1 % of social workers used computers for record keeping. However, what is more relevant with this thesis' aims is not the numbers of people using IS but how much they 'own it'. According to Barnes (1996) there were difficulties in engaging social care staff with computer use and computer illiteracy was particularly high. Sapey (1995) attributed the reasons for the presence of obstacles to the top-down processes with their focus on control and centralisation. This form of implementation risked alienating staff from their work and decreased their professional discretion, which as will be shown in various parts of this thesis, is very important to social work staff. As a result staff felt that they had no choice over the governmental decisions to employ IS which is not practice-led but technology-led as it was concluded by Vickers (1997). Another factor which had also been credited is the training social workers receive each time

a new system is introduced. This was reported to be fragmented as it tried to cover present needs each time instead of offering general ICT skills. As Gould (1996) suggested, the training on ICT applications should be included in professional practice and not separated as a technical form of the job. The same obstacles are still found today even though the IS in social care organisations are now more advanced and user-friendly.

How to introduce technology in a way that could avoid staff's resistance and lead to successful implementation has been another major field of research. In particular studies referring to IS implementation in social care organisations by Monnickendam and Eaglstein (1993) and Riley and Smith (1997) pointed out that organisational and design factors should be taken into account when a new system is introduced. In every implementation there are several stakeholders who determine the processes and the results. For example, senior management was always interested in organisational control, effective resource management and staff monitoring whereas IT staff has been always interested in the systems' administration (Gould, 1996b).

Laudon (1974) also studied four computer systems and determined that the success of the systems depended mainly on the political and bureaucratic commitment of the organisations, not the particular choice of technology employed. Several other studies (Riley and Ickes, 1989; Gandy and Tepperman, 1990; Riley and Smith, 1997) concurred with Laudon and found that the success of IT implementation depended on the effective management of the political environment. While the technology used is important, these authors argued that, more importantly, the political and bureaucratic focus on the goal of technology must be nurtured or projects will fail. It can be argued that political and bureaucratic forces are key factors in the success of MIS in social care organisations.

Research suggests that a consistent theme in the studies of computerization that fits with the practice of social work is one where practitioner and client make decisions together. Successful computer systems were found more often in decentralized organisations. Danziger and Kraemer (1986) stated that a critical success factor is the decentralized programme, thereby giving as much control of the system as possible to the user. Oyserman and Benbenishty (1997) supported

the need for decentralized decision making in reviewing systems in Israel and Michigan. They argued that decisions must be made at the social workers' level to be successful. Monnickendam and Eaglstein (1993) further supported this concept in a survey of social workers in Israel. These social workers reported increased effectiveness when they were empowered to make decisions. Centralized organisations tend to make decisions that encompass the whole organisation while decentralized organisations encourage decision-making at lower levels within the organisation.

Using technology to support social service delivery is problematic because the field of social work bases one of its core values on the belief that change occurs as a result of the interaction between people, in particular between the social worker and the client. When processes are automated and computers reduce the physical contact or change the relationship between social worker and client, the benefit to the client may be reduced. Caputo (1988) stated that computerization can impact on this change either positively or negatively where relationships anchored in respect and trust which are the foundation for effective functioning.

Following the deaths of Victoria Climbié and Baby P information technology has gained a ground for interesting and challenging discussions. The introduction of CAF, a standard process designed to support early intervention and encourage other professionals to continue working with families rather than refer to children's social care, is having its own unintended impact, and has raised considerable comments. The main concerns focus around confidentiality, anonymity consent and use of the systems, cost and lack of evidence about whether it is the most appropriate way to improve services for children (House of Commons Education and Skills Committee, 2005; Hudson, 2005; Munro, 2005; Penna, 2005).

The widespread introduction of computerised technologies has been a crucial factor in the application of social work skills and processes. It has been a means both of rationing services and of standardising the social work task. Such technologies now dominate the working lives of most social workers (and are, of course, the basis of the social care call centres, which are springing up in different parts of the UK).

3.6 Conclusions

This Chapter began with a discussion of the development and implementation of MIS in social care organisations and how information systems have evolved in that specific field. The Chapter then explored the management models, which have been predominately employed in social care organisations and affected how social care organisations are organised and operate. This Chapter also examined the shared relationship of MIS with organizations, and the fact that MIS and organisations have a mutual influence on each other. On the one hand, MIS must be aligned with the organisation in order to provide information needed by important groups within the organisation. On the other hand, organisations must be aware of and open to the influences of MIS in order to benefit from new technologies. MIS affect organisations, and organisations necessarily affect the design of systems. It has also been discussed that the relationship between management and organisational structures is critical in relation to their potential for success in implementing systems, which involve the cooperation of professional staff that employ professional discretion to carry out their complex roles.

An understanding of the issues and the complex interrelationships is considered an essential tool for the development and implementation of MIS in social care organisations. The implementation of comprehensive information systems in social care has proven to be a path ridden with risks and dangers (Kerslake, 1996; Steyaert et al., 1996). It has become evident that there are more failure stories to tell than there are success stories, and the more comprehensive the technology, or the wider the period of the implementation, the more difficult it appears to be to achieve success (Cross, 2005). It has become equally apparent that organisational issues account for many of these difficulties, such as the organisational structure of social care organisations (Steyaert, 1996; Steyaert and Gould, 1999). Bureaucratic elements exist and shape internal and external relationships. For example, decision-making processes which are still based on bureaucratic and Taylorist structures hinder innovation and utilisation of new technologies.

Moreover, it is necessary to point out that until now social care organisations have experienced the introduction and implementation of MIS as an external

factor, which is imposed on them from central government in order to make them more efficient. This has a major effect. It creates a new powerful group of people within social care organisations who are responsible for the implementation and maintenance of systems. This change created a dichotomy, as it has been explained earlier in this Chapter, in the organizational personnel. Social workers have found themselves in a position where they enter data about their clients into a computer, without seeing any further use of it by themselves. People who manage the computer system will process this data and will produce results and reports, which they might not disseminate appropriately. It is a phenomenon very well observed especially in the past where information produces knowledge and power and of course IT people might be reluctant to grant this privilege (Harrington, 1991; Scarbrough and Corbett, 1992).

To achieve the aims and objectives of this study, the research methods employed for an in-depth understanding of this area of study in this thesis will be presented in the next Chapter.

CHAPTER 4: Research Methodology

4.1 Introduction

In Chapter 1 the main research questions were outlined, considering carefully the literature review. In this chapter the theoretical explanation for choosing the most appropriate research methodology is discussed and analysed.

A primary consideration took into account that when designing a research study a set of interrelated decisions have to be made. These decisions refer to the epistemological and ontological perspective informing the research, the methodology used to investigate the research problem, and the methods of data collection and analysis (Creswell, 1998; Crotty, 1998). A selected number of authors were studied (Bryman, 2004; Denzin and Lincoln, 2005; Ritchie and Lewis, 2003; Sarantakos, 1998) to identify and explain the factors that influence the research such as the theory, the design, and the values of the researcher and also to illustrate any practical considerations. It is the aim of this Chapter to address these issues.

Bearing in mind the above, the Chapter attempts to explore the epistemological issues, the aspects of the interpretive perspective employed in this research study and the reasons for carrying out a qualitative study. The illustration of these issues is expected to help the reader to understand and assess under which perspective the worldview and social construction is being explained. Following that, an identification of the chosen strategy takes place; the rationale for adopting a case study research methodology is discussed. It actually provides specific directions at a more applied level. The Chapter continues with a description of the methods for data collection, research activities, and the approach to data analysis. Finally, practical and ethical considerations are discussed in response to issues and concerns raised during the whole process.

4.2 Research Design: Using a Qualitative Framework

4.2.1 Inquiry Paradigms

This Chapter begins by exploring the philosophical paradigms in relation to notions of physical and social reality, of scientific knowledge (epistemology) and the relationship between knowledge and the empirical world. It is valuable to describe the researcher's influence about how specific knowledge will be gained, what values lay aside and which processes are going to be used to study it (Creswell, 2003). According to Guba (1990:17) a paradigm may be viewed as a basic set of beliefs that guides action. It contains a worldview, a way of breaking down the complexity of the world and explains what is important, legitimate and reasonable (Patton, 1990:37). It also refers to the focus of research and the related ways of approaching an inquiry. Inquiry paradigms define for inquirers what it is about and what falls within and outside the limit of legitimate inquiry. Guba and Lincoln (1994) argue that paradigms are based upon the way in which the nature of reality is conceived as a coherent ideological construct within the paradigmatic worldview; each one can interpret changes under different motives and aims.

Guba and Lincoln (1994) and Neuman (2003) recommended that to develop an inquiry paradigm the first question to be addressed is the ontological question. This asks what 'reality' is and what can be known about 'reality'. If, for example, it is assumed the world is 'real' then what is known about the world and how does the world work? This position serves the researcher's initial search to understand practitioners' perspectives within their working conditions and changing frameworks. The intention was to understand the social process by getting inside the worldview of those creating and maintaining it (Sarantakos, 1998).

Those arguments lead to the decision to employ the interpretive paradigm as the most appropriate theoretical knowledge claim to guide this research study because it is based on the assumption that individuals, groups, social contexts, local services and wider systems are imposed upon human activity. It was accepted that reality and social world are created by the actors (in this case social work practitionerss working in the system) through assigning meaning systems to events, an interpretive perspective (social constructivism). The research within the context of this approach was regarded as a challenge to explore the underlying

premises and assumptions of professionals and social care organisations. In particular, there was a principal concern with issues of understanding their definitions about the current situation and related problems, identifying how these meanings were embodied in their practice and examining what kind of realities could be produced. The rationale behind that decision was based on the sense that the researcher could not enter the field by imposing her pre-defined set of beliefs about the problems occurring. The aspiration was to obtain findings by in-depth examination and exposure to the phenomenon of interest. Henfridsson (2000) argues that managers, designers, and social workers have different assumptions about what technology is and how it can be used. There was willingness for change including the capacity to 'see' things within a different perspective, which might provide the credentials for transformation of the practice and thinking culture. Based on this argument it was indicated that it was important to understand and reconstruct the social constructions that professionals and the researcher held towards consensus by providing opportunities for new and alternative interpretations as information and complexity was increased (Schwandt, 1994).

Following the arguments on the selected research paradigm a discussion on deductive and inductive reasoning follows which explains the approach the researcher followed in order to discover categories, dimensions and interrelationships.

4.2.2 Deductive and Inductive Reasoning

Using a quantitative or qualitative approach in social research relates to the way the researcher thinks about their methodology and interprets the phenomena. In logic one can refer to broad methods of reasoning, which are deductive and inductive reasoning (Holdaway, 2000). Deductive reasoning refers to working from the general to the specific. The researcher might begin thinking with a general idea and later narrows this down into more specific hypotheses that can be tested. In contrast, inductive reasoning works from specific observations in order to develop broader generalisations and theories. Inductive reasoning, according to Darlington (2002), is open-ended, exploratory, and qualitative, while deductive

reasoning is more narrow and quantitative in nature and is concerned with testing or confirming hypotheses.

Inductive reasoning (often called constructive or generative reasoning) led this research because it offered the possibility of discovering relationships among phenomena and the factors that create them (Miles and Huberman, 1994). This research project sought to discover relationships and empirical evidence as the research participants experienced or developed them. It did not seek to test any a priori assumptions in a given context or environment but to explore and understand what generates relationships and networks and why they are so important among people. It actually allowed the researcher to develop the working hypotheses, which were amended and transformed as the fieldwork progressed. The next section begins by discussing the best chosen research strategy.

4.2.3 The Quantitative - Qualitative Debate

The above description of philosophical paradigms provided the foundation of theory in which the research strategy was based. Following the above methodological decisions, a discussion about the quantitative – qualitative methodology is illustrated. The purpose was to justify the researcher's decision to follow a qualitative approach (Bryman, 2004) for the collection of problems, thresholds and triggers in conjunction with the challenges and opportunities for further development.

Guba and Lincoln (1994) have claimed that research and more specifically scientific research in the field of natural sciences such as physics and chemistry has dominated the field by a need to quantify hypotheses using mathematical formulas in order to predict and control natural phenomena. This quantification is widely believed necessary for the validity and legitimacy of findings in that field of science. Guba and Lincoln (1994) continue to question that need of quantification. They argue, instead, that qualitative techniques based on the interpretation of non-numerical data can provide meaning to human behaviour. They highlight the value of qualitative perspective as a means of understanding the

authentic perceptions and feelings in a way that emphasises the sensitivity to the experiential knowledge of participants (Lincoln and Guba, 2000).

Qualitative methods allow for the researchers to bring their personal-self into the research along with their researcher-self. Biases, values, and interests are acknowledged and included in the reporting of findings (Creswell, 2003; Glesne, 1999; Merriam, 1988). Qualitative research looks at the research setting from the viewpoint of deep understanding rather than micro-analysis of limited variables. The interest is in the stories and the experiences of people in the natural setting. Instead of trying to prove or disprove a hypothesis, qualitative research looks for themes, theories, and general patterns to emerge from the data. According to Merriam (1988:3) qualitative research "is hypothesis-generating" rather than serving to test a hypothesis. Examining the experiences and stories of participants helps to illuminate what works, in which context, how and why. It reveals the story behind what quantitative results might show and will be much more conducive to finding answers to the research questions.

This thesis adopted a qualitative research methodology. The reason for following this approach was the interest to explore people's perceptions in reference to the MIS implementation in the social care organisations' environment. It also aimed to capture the "living experience" from the perspectives of those who experience it and to create meaning from this (Padgett, 1998:9). The intention was to "to get inside the 'black box' of programmes and interventions…and make sense of their outcomes" (ibid: 1998). It allowed the researcher to obtain a more in depth response (a different 'reality' of each participant) (Marsland et al., 2001) about their experience towards MIS implementation in social care organizations with particular reference to social work practice. The main concern was to highlight the complex combination of factors that undermined efforts which hinder or facilitate social work practitioners in adopting MIS in their daily practice. It also attempted to scrutinise the conditions that reflect on the current situation beyond any official government findings and circulars, and describe difficulties in utilising MIS in social care organisations and to identify any opportunities for social care staff to create organisational knowledge through the use of MIS.

The next section refers to the chosen research strategy. In particularly, it attempts to describe the advantages of using the Case Study method as a strategy that serves the objectives of this thesis.

4.3 The Case Study Method

4.3.1 Background

The use of case study to probe an area of interest in depth is particularly appropriate as described by Patton (1987). Case studies become particularly useful where one needs to understand some particular problem or situation in great-depth, and where one can identify cases rich in information. In explaining what a case study is Yin (1994) suggested that the term refers to an event, an entity, an individual or even a unit of analysis. It refers to the collection and presentation of detailed information about a particular participant or small group, frequently including the accounts of subjects themselves (Yin, 1993 & 1994). It is an empirical inquiry that explores a contemporary phenomenon within its real context using multiple sources of data and methods of data analysis. Anderson (1993) cited a different perspective about the understanding of how and why things happen, which actually allows the exploration of contextual realities and the differences between what was intended and what actually took place.

For this thesis, the case study was chosen as the most applicable method to provide reasonable answers and justifications to the research questions. It enabled the researcher to understand the complex situations within social care organisations surrounding the MIS implementation.

4.3.2 Definition and Types of Case Study

A primary step for designing a case study research was to consider the type of case study that would be conducted. Yin (1993) and Stake (1995) used different terms to describe a variety of case studies. Yin (1993) identified three specific types of case study: exploratory, explanatory, and descriptive. According to Yin (1993) in exploratory cases, fieldwork and data collection may be undertaken prior

to definition of the research questions and hypotheses. Explanatory case studies are suitable for causal studies and finally, descriptive case studies require that the investigator begins with a descriptive theory in order to determine the priorities for data collection. Stake (1995) added three more types, by giving emphasis to the purpose of inquiry: intrinsic – when the researcher has an interest in the case and only in that specific case, instrumental – when the case is used to understand something more than this particular case, and collective – when a group of cases is studied.

This study according to Yin (1993) employed exploratory, descriptive case studies looking for common patterns or pathways in day to day interaction with MIS, points of convergence, points of divergence, and 'gaps' (points where expected activity is missing or does not happen). Following Stake (1995) the case study was instrumental as it was used to understand phenomena in a very specific context.

Cases studies can be either single or multiple-case designs. Single cases are used to confirm or challenge a theory, or to represent a unique or extreme case (Yin, 1994). These studies can be holistic or embedded; the latter occurs when the same study involves more than one unit of analysis. Multiple-cases, in contrast, strengthen the results by replicating the pattern-matching, thus increasing confidence in the robustness of the theory. This research study follows a multiple-cases design to explore the researched items through the use of a replication strategy to achieve theory-building (Bryman, 2004; Eisenhardt, 1989). Evidence from multiple case studies was regarded as more robust, able to transcend local idiosyncrasies and to reach more established conclusions (Hakim, 1987).

4.4 Research Activities

4.4.1 Case Study Research Design

The information systems literature contains many examples of the interpretive case study approach (Orlikowski and Baroudi, 2001; Eisenhardt, 1989, Walsham, 1995 & 2001), many of which are referenced in this thesis. The research style normally necessitates substantial involvement in the research situation (often

entailing interviewing) in a participant or non-participant mode. The result is ‘thick description’, often written in a chronological, story-relating fashion allowing enough detail to assist analysis of the interpretations of the research subjects. The researcher cannot be free of his/her own interpretations, and considerable care is needed to offer analysis in an open and explicit manner, so that the reader is able to make judgments about its validity. Walsham (1995), following Eisenhardt (1989), suggested that theory may be involved in three ways:

1. as an initial guide to design and data collection,
2. as part of an iterative process of data collection,
3. as a final product of the research.

The first may stem from the need to start from an informed position, but may produce the opposite effect, where analysis and conclusions were dominated by the guiding theory. The iterative approach in this research allowed the theoretical position to be developed as data collection and analysis proceeded. There may be a problem in generalising from case study research, where depth is substituted for breadth, but Yin (1994:3), suggested that case study research is not about generalisation from a sample to the whole but rather a development of critical thinking. The above mentioned contributed in identifying possible themes and issues related to the thesis’ aim and in guiding the research activities.

In the previous section, it was stated that this research study would follow a multiple-cases design. The main characteristic of them is the replication strategy. They have to be conducted with the aim of predicting similar results (literal replication) - where the cases are designed to corroborate each other, or producing contrasting results for anticipated reasons (theoretical replication) - where the cases are designed to cover different theoretical conditions (Bryman, 2004; Eisenhardt, 1989; Yin, 1994). The exploratory mode of this research, did not allow determining the most appropriate theoretical base to use to guide the selection of cases, before the completion of the data collection process. The decision was therefore made to select cases that differed on a range of measures: organisational structure, geographical location, different type of provided services and consequently different service users. According to this model, if all or most of the cases provide similar results, there can be substantial support for the development

of a preliminary theory that describes the phenomena (Eisenhardt, 1989). Thus, it provided the greatest coverage and best chance of identifying patterns of difference or similarity between the two selected cases.

4.4.2 Building the Reliability and Validity of Case Study

Designing and implementing a case study research, there is a need to develop criteria for evaluating the chosen methodology. The use of case study method as a qualitative methodology raises questions about the credibility of data and method of research. Consideration of these points was vital for this study to build and maintain validity and rigour in the data. To satisfy the credibility of the study four different logical tests were established. According to Yin (1998) these include questions of construct validity, internal validity, external validity, and reliability.

Construct validity requires the researcher to select the correct tool or method for the concepts being studied. It uses several ways to measure the key variables (constructs) in the study to overcome possible problems of inaccuracy. This research study was designed to maximise the use of multiple sources of evidence (participants' opinions, organisations' records, policy documents, and available research data). As the purpose of this research was to describe and understand the current situation including organisations' position from participants' point of view, feedback on data interpretations was sent back to them. A copy of the research findings including both the data and analysis also contained interpretations and conclusions, thus prompting participants to verify that interpretation of meanings and findings were accurate and appropriate. This report was accompanied by a letter asking that they could contact the researcher if they had any matter for discussion arising from the findings. However, only a couple of general comments through emails were received.

Internal validity demonstrates that the conditions being observed will necessarily lead to other conditions and is discovered by triangulating various pieces of evidence. The researcher must establish a credible line of evidence that can be followed to these conclusions. Internal validity was not relevant to this research as it refers to explanatory or causal studies only, and not for descriptive or exploratory studies establishing a causal relationship whereby certain conditions

are shown to lead to other conditions, as distinguished from spurious relationships. However, evidence of internal validity criterion was apparent during the data analysis period. It was used to test the validity of inference, like pattern matching and explanation building.

External validity usually determines if the findings can be generalized beyond the one or multiple cases being studied. This requires carefully choosing the cases and explaining why each case has been chosen. A careful and systematic selection of cases was made. The process of choosing cases and explanation of their preference follows in a following section with the title selecting cases. External validity was also increased by the number of interviewees as they are expecting to express different perspectives. The collected rich data enabled the gathering of rich information and created the conditions for thick or holistic description which permitted the presentation of those viewpoints (please refer to Chapters 5 and 6) and added one more assurance for this criterion.

Reliability refers to how well the procedures are documented (accuracy, and precision) to ensure that the research can be replicated if the same methods are applied. To achieve this criterion, this research study developed a case study protocol. Certain procedures and general rules were created and followed in using the instrument (prior to the data collection phase). More specifically, in order to increase reliability and consistency, it was decided to:

- Have a clear overview of the case study project (letters, in which the main purpose and objectives were explained, were sent and/or given to organisations and participants;
- Develop field procedures (credentials and access to sites, sources of information);
- Request access to a number of organisations' memoranda, agendas and administrative documents;
- Develop a repository set with relevant sources of evidence for case study (i.e. journal articles, memos, exchange of electronic communication, letters and newspaper articles;

- Construct case study questions (specific questions that the researcher have to keep in mind during data collection process);
- Develop a guide for case study report (outline, format for the narrative) (Yin, 1994:64).
- Create and maintain a database containing the interview data documents. It was electronically organised and would be accessible within the usual ethical conventions of research, such as research participants' anonymity and confidentiality.

4.4.3 Data Collection and Data Interpretation Strategy

Definition of research questions and possibly a priori constructs

The research study sought to explore the links between organisational knowledge and information systems in social services. Moreover, it explored the impact of MIS on practitioners in terms of the demands it would make of them professionally. For example, it might mean that their work load would need to be configured differently with the introduction of MIS, that familiar practices might need to change, or that job profiles might need to be rethought, redrafted and giving a new weighting within the staff hierarchy. According to Yin (1993:21) 'each proposition directs attention to something that should be examined within the scope of the study'. Thus, a proposition for this study was to address practitioners' participation, firstly in decision-making about MIS selection and implementation and secondly, in the production and dissemination of organisational knowledge. More specifically, the research was interested in studying the means of building organisational knowledge within the context of social care organisations.

At this point, it is essential to define some constructs considered for this study, which led the research processes of data collection and analysis. Information technology was the first construct examined as it has an important impact on organisations in terms of structure and culture as well as on working environments. There was a primary focus on the role of MIS as it affects

individuals and their daily work as well as the organisation as a whole. The use of MIS in the private sector involves gathering raw data and processing it so that information is produced and knowledge is built up for use at a later stage. Acknowledging this point, the goal of this thesis was to explore the links between the organisational knowledge and the utilisation of MIS in social care organisations.

Social care organisation constituted the second important construct to be studied, including the continuous changes, which affected their structure and environment. As stated in the literature review in Chapter 3 social care organisations have particularly defining characteristics and their statutory, regulatory framework sets it apart from other statutory or private organizations. It was important, therefore, for the project to explore and document the structural and organizational context of social care organisations, and the roles and responsibilities of its staff. Pre-existing studies have already described some of these very clearly, and this information has facilitated the development of interview questions within the study (Coulshed & Mullender, 2001; Harris, 2002, 2003).

It was also essential that organisational knowledge was studied in the context of social care organisations and this formed the third construct. Organisational knowledge in social care organisations is accumulated every day in every interaction with service users. New knowledge and skills is generated through the process of interaction between social workers and service users. This knowledge is largely dependent on practitioners' actions and interventions; however, it is not known whether it is used to inform social work practice and decision-making.

As the research fieldwork was carried out in 2004-5 and the writing up of the thesis continued until the literature review has incorporated organisational and policy changes in social care and related studies which occurred in the intervening years.

Selecting Cases: Selecting a Specified Population

There are no firmly established rules concerning the number of cases that should be investigated. Based on a sampling logic it is not appropriate to employ a large number of cases to form generalisations as cases are not seen as representing a larger pool or population (Bryman, 2004, Yin, 1994). Yin argues that 'because sampling logic should not be used, the typical criteria regarding sample size are also irrelevant', but also that 'greater certainty lies with the larger number of cases' (Yin, 1994:50). It seemed likely that a large number of cases would jeopardize the depth of the study, while studying only one case might not provide substantial empirical findings for theoretical development. Given the time and resource constraints of this project, a number between two and four cases was considered suitable.

Choosing an organisation to study was not a random matter, although it was believed that initial research questions pointed towards a broadly applicable theoretical issue (the influence of practitioners' participation on MIS implementation), that would resonate with many 'modernising' social care organisations. The selection of cases is a significant part of case study research in theory-building. In hypotheses-testing research, the concept of population is crucial, because the population defines the set of entities from which the research sampling is to be drawn (Eisenhardt, 1989). However, the sampling of cases from the chosen population is unusual when building theory from case studies. Such research relies on theoretical sampling to select cases or participants, whether or not all the stages of grounded theory are being used in a particular study (Strauss and Corbin, 1990). After entering the field, access was unrestricted and the researcher became involved in theoretical sampling. Theoretical sampling was a data collection process that continued until the very end of the research (including the write-up stage). This allowed the researcher to take advantage of emergent themes, to obtain data continuously and to maximise observation opportunities.

Efforts were made to contact and approach 5 social care organisations located close to the area in which the researcher studied and lived. Three of them responded positively, but eventually only two from the south-west region of England were affirmed their participation in the research project. The third organisation required, as a condition of its participation in the project, that the

researcher undertakes some MIS training with its social workers, but this required time spent by the researcher which could jeopardise the time schedule of the project, so the organisation withdrew co-operation.

For the first Case Study the Children Service participated including five senior managers, six team managers, six social workers, and six people involved in management information and IT applications for social services were interviewed. For the second Case Study, the Adult Service took part whereas the children services refused to participate, as they were unwilling to increase their workload. Four Adult Care locality teams took part including specialist teams linked to Health Services that dealt with people with learning disabilities and Mental Health problems. The interviewees comprised of six senior managers, six team managers, five social workers, and six IT people.

The arrangement of the selection of specific interviewees' population was done through the senior management responsible for the MIS implementation. For example, in Case Study A, the researcher met with the project manager of the MIS project. The research rationale as well as the activities in which the research participants would be involved (interviewing, observation) was explained. The project manager informed the researcher that only the Children Service would be available to take part because the Adult Service was under a Social Services Inspectorate inspection at the time and the research project would have added more to their workload. It was agreed to prepare a recruiting letter to attract interviewees and send it to social work teams. The letter was sent to team managers and after consulting with their staff, they informed the researcher with the names of the practitioners who were going to participate. The letter asked for their voluntary participation to the research so when team managers collected the required staff members informed the researcher that interviewing could start. The project manager also contacted the group managers and informed them about the research asking them to take part. He also appointed the six IT staff, including himself, who had most been involved with the MIS project implementation for social services. A similar process was followed regarding selecting the research participants and approaching them for Case Study B as well.

Arrangement of Interviews

Following the official confirmation, the researcher contacted each research participant separately and made appointments in their personal offices where the environment was secured and protected from external interruptions. By understanding the issues of avoiding the interruption to their daily job and any other obligations they may had, efforts were made to arrange those interviews wherever possible at their most convenient location and time. They were also informed in advance about the approximate time the interview would last. Interviews typically lasted between thirty and forty five minutes. A consent form was read and signed by all participants (see Appendix 2). The main principles of autonomy and beneficence were clearly described in that form. They were also informed about anonymity and confidentiality regarding the research project. A tick box if they wanted to receive a copy of the promised feedback report was included at the end as an additional tool to guarantee participants' anonymity. Finally, each part kept one copy of the form.

Recording data

A number of writers have referred to possible ways of recording qualitative data during an interview (Bryman, 2004; Lewis 2003; Robson, 2002; Silverman, 2001). These suggestions can be divided into two main categories: interviewers have a choice of whether to take notes of responses during the interview or to tape record it. Bryman (2004: p.329) claims that qualitative researchers are interested to capture not only what interviewees say but also the way they say it. It is this aspect that demands from the enquirer high alertness to what is being discussed, prompting further questions and following up interesting points or giving attention to incomplete interviewee's answers. Appreciating these arguments, the latter method was preferred. Tape recording was utilised as it enabled the researcher to concentrate on listening and responding to interviewee's answers and not being distracted by attempting to write down what has been said. In addition, the researcher was aware that in note taking there is an increased risk of interviewer bias as the interviewer is likely to make notes of comments which make immediate sense or are perceived as being directly relevant or particularly interesting. Furthermore, recording ensured that the whole process was captured and provided

complete data for analysis for some parts or phrases in the interview that were not recognised during the interview. Finally, interviewees might feel inhibited if the researcher would suddenly start to write or make any kind of diagrams (i.e. mind maps) as they might wonder why, what they have just said, was of particular interest.

The ideal tape recorder was small, unobtrusive and produces good quality recording (Hancock, 1998). For those interviews a digital recorder was used: an Olympus DS-20. It covered all these aspects while it gave the opportunity to copy the recording data at a later time to a PC and analyse it by using a qualitative analysis software programme.

Crafting instruments and protocols: Data collection methods

Theory-building researchers typically combine different methods of data collection. In case study research the most common methods used are interviews, observation, and analysis of documents or archival records. The use of different methods in data collection is a kind of triangulation, which provides stronger validation of concepts and findings (Yin, 1993). This thesis, for the data collection process, followed the research strategy of semi-structured interviews aided by document study and direct observation. Furthermore, a chain of evidence was established (Eisenhardt, 1989) to allow the external observer to follow the derivation of any evidence from the start to the conclusions. More specifically the triangulation process followed to enhance confidence in the ensuing findings consisted of three methods.

The first method used was the conduction of semi-structured interviews with open-ended questions a different one for each group of interviewees (see Appendix 1). It was believed that the utilisation of this technique would result in a frank and honest discourse and provide first-hand information that could be relied upon in the subsequent analysis. Each interview was then transcribed with the use of specific software called Transcriber 1.4; this encouraged familiarity with the data and allowed an overview of important issues in each site to be gained at an early stage. In addition, some data were eliminated when the content was judged to be irrelevant to the issue being explored, as this assisted the process of data reduction.

Every transcribed interview was transferred to NVivo3 software for coding and analysis in five main categories and other minor categories that aided understanding and analysis. Each transcription was stored electronically on a PC's local disc and was backed up on CDs, which were stored secured in a drawer where only the researcher had access.

The second method used was direct observation, which allowed the researcher the opportunity to revisit and re-evaluate some of the points made in the interviews. The aim of the direct observation was to understand the behaviour of the interviewees towards the MIS implementation. This could take the form of one or two-day visits to each organisation to observe social workers' daily administrative work, for example, handling paper work, keeping records, using MIS and ICT (internet, intranet, e-mail etc). All observation notes were typed and stored initially in Word files and subsequently transferred to NVivo for coding and analysis. The researcher took field notes on the behaviour and activities of the executives at the research sites. An observational protocol was followed by the researcher involving field notes that distinguished between descriptive notes (a reconstruction of dialogue, accounts of particular events, or activities), from reflective notes (researcher's personal thoughts, such as speculation, feelings, problems, ideas, hunches, impressions, and prejudices), and demographic information (time, place, and date of field setting).

Direct observation took place only in Case Study A. Two visits were undertaken; the first was a one-day visit to the offices of social workers. The researcher observed people working with the system (recording cases, doing follow-ups and referrals to other teams). In addition, social workers (other than the interviewees) were very keen to discuss the new system and comment on it. The second visit was observation of a Children Service's team managers' meeting with group managers and the project manager for the MIS implementation one month

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[3] NVivo 2 is designed for researchers who need to combine subtle coding with qualitative linking, shaping and modelling. A fine-detailed analyser, NVivo integrates the processes of interpretation and focused questioning. Rich text records are freely edited, coded and linked with multimedia. A project starts as soon as ideas start. NVivo enables the researcher to take qualitative inquiry beyond coding and retrieval, supporting fluid interpretation and theory emergence (http://onlineqda.hud.ac.uk/Which_software/what_packages_are_available/theory_building_software.php#NVivo, accessed on 26/12/05).

after the implementation aimed at identifying difficulties and threats and developing practical solutions. The observations made through the two visits in Case Study A confirmed the majority of the points and issues raised on the interviews. For Case Study B when the research was carried out the chosen MIS was implemented but only administrative staff used it at this time.

Document analysis was the third method. A document analysis was undertaken examining legislation and policy as well as, materials and resources relevant to MIS implementation including training. The purpose of the document analysis was to identify what Robson, Shannon, Goldenhar and Hale (2001) described as relationships between policy and practice. This analysis was employed to identify and study the approaches the two organisations followed to introduce the new MIS. Documents used for the analysis included newsletters of the projects teams to social work teams, project initiation documents and the revised business processes documents of each organisation. In this research project the document analysis involved the study of documents each organisation provided the researcher with. The aim here was to confirm events and procedures which the interviewees mentioned or referred to during the interviewing.

Direct observation in the workplace provided an opportunity for the researcher to understand practitioners' and managers' interactions, processes and behaviours in context. The study of relevant documentation also helped the researcher to familiarise herself with the two organisations and contextualise and comprehend workforce behaviours and data gathered from the semi-structured interviews. Together, both approaches offered the researcher an important opportunity to understand practitioners in their environment.

Entering the field: Overlap data collection with data analysis

According to Eisenhardt (1989) an essential feature of theory-building from case studies is the overlapping of data analysis with data collection. For example, Glaser and Strauss (1967) argue for joint collection, coding, and analysis of data. Overlapping collection and data analysis offered the researcher the opportunity to make adjustments during the data collection process. Adjustments can take place such as the addition of cases or questions in the interview protocols or it can

include the adding of data sources. Moreover, Miles and Huberman (1994) urge for coding to be done as early as possible as this facilitates ongoing data collection. Early coding leads to a reshaping of the researcher's perspective and of assessment of the instruments used for data collection. Additionally, ongoing coding uncovers real or potential sources of bias and reveals incomplete data that can be clarified next time out in the field (Miles and Huberman, 1994).

This project followed the strategy of ongoing coding in order to ensure that the data gathered were complete and clear. For example, after each interview was conducted, it was transcribed and imported to the chosen software package (NVivo) for coding and analysis. Although Miles and Huberman's (1994) preferred method is that of creating a provisional "start list" of codes prior to fieldwork, the preferred method in this project was the one suggested by Strauss (1987) and best described in Strauss and Corbin (1990). According to this method, initial data were collected, written-up and reviewed line by line, typically within a paragraph. Beside the paragraph, categories were generated and listed. According to Strauss and Corbin (1998), coding is 'the analytic process through which concepts are identified and dimensions are discovered in data'. Categories were defined here as 'concepts that stand for phenomena' identified in the data. The codes were connected to the research questions and interconnected with the literature review. The categories were re-examined regularly and more abstract categories were created. As a way of getting started, Strauss (1987) suggests coding for "conditions", "interactions among actors", "strategies and tactics" and "consequences". To locate the conditions, for example, the researcher looked for words such as because or since. To find the consequences one followed terms, such as, as a result of and because of. Moreover, phrases that were used regularly by the interviewees ("in vivo" codes) were also good guides. As part of the analysis, similarities and differences about the compiled codes were clustered together to create categories and provide evidence to support the themes developed - e.g. text samples. Conceptual saturation was reached when no new categories were generated.

Pattern coding was used to facilitate the cross-case analysis. According to Miles and Huberman (1994:69) pattern codes are explanatory or inferential, and classify an emergent theme, construct or explanation. As the first method of

coding selected was a tool for summarising segments of data, pattern coding was used as a way of grouping these summaries into smaller numbers of sets, themes or variables. Pattern codes were created by adding them in a provisional form to the list of codes and they were tested on the next set of transcriptions to see whether or not they fitted4. Furthermore, common themes among the interviewees' perceptions were identified and examined in relation to the context, meanings, and circumstances of social services. Interviews were coded by conceptualising underlying patterns in the data. Following the pattern coding and the generation of five major thematic categories, observation notes were analysed in addition to the documents. This analysis used the same codes that were created from the interviews.

Analysing Data: Within-Case Analysis and Cross-case Analysis

For the qualitative case study design, data analysis summarized the characteristics that seemed to be associated with the experiences and attitudes of social workers towards MIS implementation in social care organizations. The experiences were discussed with full acknowledgement of the limitations of informal qualitative research. The responses to the open-ended questions provided by respondents have been assessed by determining the similarities between groups of interviewees. Responses from participants were transcribed and categorized based on similarity of responses and coded following the conclusion of each case study.

All transcribed interviews were entered into a database indexed by interview number, and question number and responses. Next, all responses to the same question were collected from the individual interview database as a single response in a composite database. With the information from the composite databases, observations, organisations' documentation, a case description for each case study was made based on the constructs. This analysis provided intimate familiarity with each case as a standalone entity, allowed the unique patterns of each case to emerge and accelerated cross-case comparisons (Eisenhardt, 1989).

[4] This process is better described by Lincoln and Guba, (1985), as "discriminant sampling".

Miles and Huberman (1994) stated that within-case analysis can take place either during or after data collection depending on the sorts of early analysis coding. In this project, within-case analysis was used to monitor the progress of the research, but the final more detailed analysis took place after the data collection process was completed. The aim was to provide detailed write-ups for each case. According to Miles and Huberman (1994) within-case analysis is preferred because it offers preliminary conclusions about what is happening in the case –and how. These write-ups were pure descriptions of each case and their purpose was to familiarise the researcher with the data. This process allowed the unique patterns of each case to emerge before the researcher moved forwards to generalise trends across cases.

An iterative and cyclical process characterized the interaction between data collection and the three components of data analysis: data reduction, data display and conclusions drawing (Miles and Huberman, 1994). The ongoing data collection, analysis and collection cycle of iterative induction and deduction was consistent with the inductive research logic adopted in this research. The approach to coding in this research has been determined by the epistemological stance of interpetivism.

Data reduction refers to the process of selecting, focusing, simplifying, abstracting and transforming the data that appear in written-up field notes or transcripts. This approach sharpens and organizes the data in preparation for conclusion drawing and verification. The reduction activities consist of coding, writing summaries, and identifying themes and clusters (Miles and Huberman, 1994). In this research, interview transcripts and observation notes were selected, focused and simplified. Data displays were another technique used in within-case analysis and allowed data organized and reduced in a way that allowed conclusion drawing. They also helped the researcher to identify patterns. Miles and Huberman (1994) suggest that the write-ups for each case can take two forms, either text or displays and graphs. Text was this research was used as an intermediate stage to help the researcher to move on to displays. For each case study, a thorough description of participants' answers is provided in Chapters 5 and 6. Each group of participants is presented according to each thematic category. Quotations used

represent the whole of the group. Finally, a summary of the most important findings derived in each case is given in case-ordered matrices.

The third type of analysis was conclusion drawing and verification. Conclusions should not be drawn too early but in the late stages because exploring relationships may not be the same as research progresses thus avoiding premature conclusions (Miles and Huberman, 1994). In this research, the common themes were drawn after all the data were analyzed and all the factors, events and outcomes identified. This analytical phase included consideration of all the materials developed through the research activity of data collection. The purpose here was to ensure that all the substantive themes and issues have been included and also to avoid the researcher's personal perceptions or experiences to emerge. Additional personal notes worked over after the interviews and observation had completed. This facilitated the construction of a comprehensive picture of what occurred and provided a greater opportunity to justify findings.

Additionally, the cross-case analysis was employed in order to test the common issues identified in the last section of within-case analysis. At this stage, it is very common to reach premature or even false conclusions because the amount of data can be overwhelming (Eisenhardt 1989:540). So the key to avoiding such tendencies was, therefore, to examine the data in different ways. A tactic suggested by Eisenhardt (1989:540) was to select pairs of groups between the two cases and then to list similarities and differences between each pair. This tactic assisted the researcher in finding slight similarities and differences between cases. The data were displayed in role-ordered matrices according to the position each group of interviewees is occupying within the organisations in Chapter 7 (Miles and Huberman, 1994).

Embracing Literature: Linking with conflicting/similar literature

An essential step in theory-building from case studies is the review of the literature (Eisenhardt, 1989:544). In this project, the literature review examined the policy which had a profound influence on ICT development in social care organisations, its impact on organisations management and on MIS implementation in particular. This raises the questions of what is it similar to, what

does it contradict, and why. Examining conflicting literature on the emergent theory is important for two main reasons. Firstly, if the researcher ignored conflicting findings then confidence in those findings would be reduced. Consequently, the results could be considered to be incorrect (a threat to internal validity) or if they were correct they could be applied only to the specific cases (a threat to generalisability). Secondly, the examination of conflicting literature offered the opportunity to the researcher to be more creative and as a result to gain a deeper insight into both the emergent theory and the conflicting literature. Additionally, literature discussing similar findings binds together underlying similarities in phenomena normally not associated with each other. Consequently, the theory has stronger internal validity, wider generalisability, and a higher conceptual level. While linking results to the literature is important in most research, it is particularly critical in theory-building research because the findings rest on a very limited number of cases.

The aim of the literature review was to scope the extent and distribution of the literature on management information systems implementation and how social care staff experienced that as well as how social work practitioners contributed towards the creation of organisational knowledge in social care organisations. That aim was achieved through the illustration of the main gaps in knowledge and the identification of principal areas of dispute and uncertainty. It was also helped by identifing general patterns to findings from multiple examples of research in the same area and juxtaposing studies with apparently conflicting findings and explore explanations for discrepancies.

The literature search was English and mainly looked for texts in the UK. The literature review set as a starting point the year 1997 when the change of government in the UK also signified important changes for social care organisations. Tthree main bibliographical search strategies were carried out. The first searches started with key on-line databases such as IBSS, IngentaConnect, Science Direct, ASSIA and EBSCO and the Internet for studies published between 1997 and 2010. The second search strategy included searching websites of key organisations such as leading social care organisations e.g. the Social Care Institute of Excellence. Finally, the third strategy consisted of books and peer-reviewed journal papers as the bibliography regarding MIS implementation in

social care organisations received a major interest in the decades 1980s and 1990s. That last strategy continued till 2010 when the writing of the thesis **began in order to obtain any relevant updates** on the literature. The main key words used throughout the bibliographical search were: social work practice, social work practitioner, management information systems, MIS, Information and Communication Technology, ICT information systems, IS, organisational change, organisational structure, organisational learning, and knowledge management.

Performing a search was facilitated by dividing it into a series of 'concepts' and thinking of alternative terms for each concept and then searching each concept separately and in combination. The approach followed to perform the search was systematic in order to find all relevant material and retrospective in order to find the most recent material and work backwards. Citation that referred to following leads from useful articles, books and reading lists and targeted when restrictions applied regarding the research topic and focused in on a narrow area of the literature.

The main themes researched were social work and information management, system users' participation in the implementation of MIS, social welfare management, knowledge management and learning organisation. More specifically, regarding the theme social work and information management as well as social welfare management, knowledge management and learning organisation the search was expanded to the USA too searching mainly through databases and journals for key articles, which did not emphasise particularly in the American context. The bibliography was updated on the field of social work regarding the introduction of ICS and MIS utilisation in social care organisations in England. It was also included various policy papers which were introduced in 2010 and 2011 regarding Child Protection e.g. the Munro Review.

The analysis of the literature was based on the following steps: Overview of articles and grouping them in various categories such as MIS and social work practice, social workers participation etc. according to the research questions of the thesis. Then, it was important to take notes of key words, terminology of MIS and social work, definitions and major trends or patterns. Finally, it was also necessary to identify gaps in the literature and to identify relationships among studies such as which studies were landmark and led to subsequent studies in the area of interest.

Reaching Closure

According to Eisenhardt (1989:545) there are two important features in reaching closure. The first is recognising when to stop adding cases and the second knowing when to stop iterating between theory and data. In the first, researchers should stop when theoretical saturation is reached (Glaser & Strauss, 1969). Eisenhardt (1989:545) defines theoretical saturation as "the point at which incremental learning is minimal because the researchers are observing phenomenon seen before". For example, theoretical saturation is comparable to ending the revision of a transcription when its contribution in quality becomes minimal. The same principle applies in the second feature of closure that of stopping the iterating process between theory and data saturation. For the specific qualitative study, the underlying search was 'not the amount of data but rather the richness of the data; not the total counts but the detailed descriptions' (Carey 1995:492). The process stopped when the improvement to theory was considered minimum.

The data saturation was driven by the desire to learn in detail and in depth about the experiences of individuals. Hence, the final decision about numbers of interviewees was based on evidence of data saturation ('redundancy') which occurred when 'no new information of significance (was) obtained' for ongoing thematic development and theorising (Lincoln & Guba 1985: 202; Patton 1990; Higginbotham et al., 2001:236). The decision that data saturation or data redundancy had been reached was facilitated through constant comparison of data (Glaser & Strauss 1967; Glaser 1999). The researcher asserted that she had saturation 'grounded in the empirical confidence attained from repeatedly comparing data to additional data' (Cutcliffe & McKenna 2002:614). The researcher moved back and forth between the data and emerging uncertain thematic identification and interpretation. In this process, the researcher identified reoccurring patterns and themes in the data (Cutcliffe & McKenna, 2002:614). Consequently, this constant comparison of data was dependent upon concurrent data analysis and collection (Rose & Webb, 1998).

4.5 Practical and Ethical Considerations

At this stage of planning process, it was considered as important to think and reflect on the potential ethical implications of the research process. Carrying out social research involves balancing a number of different principles which might create tensions for participants. It was recognised that it was the researcher's obligation and responsibility to establish such a balance and to avoid unpleasant implications before embarking on the data collection process. Most professional bodies in the social sciences have published specific codes of practice and ethics for contacting participants (Brewerton & Millward, 2001). The particular ethical framework that was adopted is based on the ethical values that govern Social Work Research and the British Psychological Society. The ethical foundations for a code of ethics for social work research are drawn from the ethics of social work (Butler, 2002). Such a code is to be applied when the nature of research is designed to engage with the practice of social work and might include professionals, service users, policy makers and other social work researchers. As this research intended to interview professionals, careful consideration of possible ethical issues was made throughout the research (data collection and analysis). The principles of participants' dignity, autonomy, and beneficence, voluntary participation, not causing any physical of psychological distress, confidentiality and anonymity of data were applied. The researcher ensured that these rights were secured by preparing an informed consent for every interviewee.

After obtaining the permission from each organisation to begin with the fieldwork the researcher arranged to meet with the interviewees privately in order to conduct the interviews. Prior to the meeting, the researcher asked the interviewees to arrange for a room in which the interview could be conducted, in case they did not have their own private office. For example, most of the social workers worked in an open-plan space so alternative arrangements had to be made to secure privacy. At the beginning of the interview, the researcher would read the informed consent (please refer to Appendix 1) to the interviewee so that he/she would be aware of their rights. This included the reminder that their participation was entirely voluntary, that they could refuse to answer any questions and that they were free to withdraw at any time. It also reassured the interviewees that their answers would remain confidential and that they would be available only to the

researcher. Moreover, it confirmed that extracts of the interviews would be used as quotations but in no case would the name or any other identifying characteristic of the interviewee would be revealed. Finally, a signed copy of the informed consent was offered to each research participant.

Underpinning all of the above issues, the aim was to treat participants fairly and to present them with consideration and respect at all stages of research. In more detail the following actions took place:

The researcher made an effort to give as much information as possible to the interviewees before singing the informed consent so they knew before hand what this research was about (Wiles et al., 2005:12). One difficulty identified especially in the beginning of the fieldwork was the time available for the interview. Most of the interviewees were busy professionals with limited time to spare. The difficulty was to describe all the themes involved in the research in a very little time. As the fieldwork went on the researcher learnt to point out the really important features of the research and the easiest to understand.

The right to withdraw at any point of the research procedures was provided to the individuals' interviewees in case they did not feel comfortable with the issues raised through the interviewing process or they did not how to answer. There were not identified such cases or interviewees who wanted to withdraw their interview after it was completed. In general the researcher noticed in both Case Studies that all interviewees felt quite secured and could discuss their experiences related to the research topic. As it will be shown later in the research findings analysis even the front-line staff expressed their views about the MIS implementation freely without fearing if the organisation will react negatively to their comments.

Offering confidentiality was considered an important principle at the beginning of this research, to gain trust and encourage participants to speak openly and honestly. It assured them that any information they revealed, which was sensitive, personal or problematic, that they wished to keep confidential, would be respected and that they would not be exposed. Honouring confidentiality also meant staying alert in the process to issues individuals wished to keep private. The research was particularly sensitive to statements like – 'I would prefer it if you did

not use this', 'this is in confidence' – or signs in their body language. It was made an effort not to ask intrusive questions or point at issues which could make them uncomfortable. Pseudonyms were used in reporting individuals and organisations; staff were referred only by role in the research analysis. While this may not guarantee anonymity, it reduced the likelihood that individuals and organisations could be identifiable. There was no other reference in the research findings analysis, which could characterize them for example name of team or section they worked for or any other of source of evidence.

4.6 Conclusions

This Chapter has provided the reasons for selecting the chosen methodology, how the researcher implemented this methodology and the considerations that were taken into account in adopting the research methodology were presented. Qualitative case study design was chosen to conduct this research because it was determined to be a useful method for exploring the perceptions and experiences of staff members in social care organisations as they relate to MIS implementation. It was argued that this methodological approach was appropriate to an exploration into the impact of MIS upon social work practice and organisational knowledge, and contributes to the development of two theoretical models for practitioners' participation in decision-making processes for MIS selection and implementation and in creating, storing and disseminating organisational knowledge in social care organisations. In making the choice of research approach and selecting the methods, the aim was to start from the research participants' perceptions and allow a flexibility of method selection depending on the emerging lines of enquiry.

Reflecting on this material, Chapters 5, 6, 7 and 8 present and describe how empirical data was interpreted as well as link it with literature in order to form theoretical models.

CHAPTER 5: Case Analysis, Interpretation & Discussion of the Research Findings – Case Study A

5.1 Introduction

The findings for each social care organisation are presented separately in Chapters 5 and 6, and a comparative analysis of questions and issues arising will follow in Chapter 7. The main reasons for taking the decision to separate the findings in relation to within-case analysis into different chapters are as follows: (a) the sheer volume of detailed material, the effort to familiarise the reader with each case separately and the need to reduce that volume by identifying patterns (similarities and differences) across groups of interviewees in each case separately, (b) the need to illustrate the text with verbatim comments that may overlap between case A and case B and have the potential to create confusion for the reader, (c) the complexity of some of the material and the need to report this in some detail, and (d) the desire to do justice to the separate contributions of each of the social care organisations that took part in this research, and their individual characteristics.

Based on the research design and methodology discussed in Chapter 4 this Chapter presents the data generated during the semi-structured interviews with social workers, team managers, senior managers, and IT staff in Case Study A. Its purpose is to provide thorough description of Case Study A and to discuss the findings according to the identified thematic categories which in turn will allow for drawing conclusions.

According to the methodology discussion in Chapter 4 the thematic categories developed are: Practitioners' and Team Managers' Feelings about the new MIS' Implementation, Participation, Management Information System, Social Work Practice, and Organisation and Organisational Knowledge. Each of the categories consisted of themes and subthemes generated from the interviews and connected to form the specific thematic category.

The research findings presented within Case A and then within the case by thematic category and staff role type (practitioners, team managers, senior

managers, and IT staff). Quotations are used to provide textural support for the emergent themes and to present rich descriptions forming more complete and detailed pictures of the perceptions of each role type with discussion, which further assists the interpretation of the findings.

5.2. Profile of Case-Study A

The first case-study was a Children and Families Service. The group was constituted of eight social work teams from which three agreed to take part in the research. From the three teams, twenty-three people were interviewed: five senior managers, six team managers, six IT staff, and six practitioners. The Children and Families Service provided a range of services and resources to support parents and caregivers in looking after their children in the community and to support children and young people in realising their full potential. The Service also recruited and supported foster carers and adoptive families to look after those children who could not be cared for within their own family. The Service was fully committed to working in partnership with parents and young people to provide and develop services to meet their needs.

At the time of the fieldwork, which was conducted between January and March in 2004, the Social Services Inspectorate granted the Children and Families Service a 3-star rating5 and the service was assessed as 'serving most children well' and improving adequately'. The Service had strong working relationships with other statutory agencies, such as Health, Connexions, Education and Youth and Community Services, and with the voluntary sector, providing integrated services to children and their families.

Over 600 children received ongoing services, many of which were provided directly and some commissioned from other organisations. The majority of services were focused on providing help to parents to look after their children at home. These included early year's services (family centres, day nurseries, and sponsored day care), family centres, and social work and family support services. At the time of the fieldwork, there were 52 children who were on the Child Protection Register and (at 30/11/03) 126 children were 'looked after'. Services

[5] According to the Joint Area Report of 2008 the Service maintained the same star-rating.

were also provided to disabled children and their families and to care leavers (up to age 21 or 24 if in Further Education)6.

With regard to the information management and ICT investment in Case Study A, the organisation had recognised the need for developing and implementing new client index software to replace the outdated system (A Report of the Joint Review of Social Services in 20007). At that time, according to the Report of the Joint Review, there were "serious and pressing issues relating to Information Technology (IT)", which the Authority was addressing. With regard to networking and support, the Joint Review Report found that: "Despite improvements the network is reported to be slow and unreliable as network connections are lost quite frequently."

The former Social Services database, CRISSP, was replaced with a new system8 on 1st March 2004. CRISSP was a character based system, and data input was seen as the responsibility of administrative staff. It could not be interfaced with other systems internally, or with the systems of external partners. The system provider also indicated that they would not continue to support the CRISSP system in the medium future. The technology, on which CRISSP was developed, was slow, lacked flexibility and, by not being Windows based, it needed extensive manual interrogation to produce useful reports. Financial and activity based information could not be aligned efficiently, and a great deal of managerial time was spent in validating data. The new Management Information System (MIS) offered several advanced applications. These applications included: (a) a fully integrated and flexible application designed to support the complex processes in a modernised social care organisation; (b) a fully compliant application that satisfies the latest Government requirements for Referral Assessment Packages for care, Integrated Children's Assessment, and statutory returns (statistical data); (c) an e-gif compliant application able to integrate and share information across agencies and other applications; (d) a practitioner tool designed for ease of use with

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[6] Information obtained by the council's Approved Service Plan 2004-2005 for Children & Families services.

[7] The work was being carried out by a specialist national team managed jointly by the Audit Commission and the Department of Health's Social Services Inspectorate (for reviews in England).

[8] The name of the system in both case studies is not revealed for confidentiality reasons. However, it has to be noted that the two organisations selected and implemented two different systems.

integrated workflow to support case management operations; and (e) a performance management tool providing an integrated view of an organisation's activities

5.3 Practitioners' and Team Managers' Feelings about the New MIS' Implementation

Table 5.3.1 Thematic Category: Practitioners' and Team Managers' Feelings	
Themes	Doubt
	Anxiety
	Lack of choice/ oppression/ trapped/ threat
	Frustration
	Confidence

The thematic category Practitioners' and Team Managers' Feelings was about recognising how they felt about the MIS. The questions asked aimed to determine whether there were any feelings which at that time were connected with MIS implementation and their perceived impact on their daily work.

Practitioners' emotions varied from simple anxiety to doubt:

> *"… it takes more time to familiarise yourself… you know… there is an anxiety of having a system before you" SW3.*

> *"I can understand the need for an IT system… but does that deliver an effective and efficient and useful programme for practitioners? I doubt it…" SW5.*

Frustration was expressed with regard to what would happen when the system went live:

> *"I am becoming more and more frustrated, and getting to the point of wondering if it is really worth it because there is so much emphasis on sitting at your desk, keep up-to-date your records and not spending so much time with your clients" SW2.*

Moving on to the team managers group, a critical factor was to identify their role as middle level managers. They are the intermediaries between the top management in the organisation and the front-line staff. They are the implementers of decisions made at the executive levels for progressing down the hierarchy to the ground level of the organisation. They have to achieve a balance between carrying

out the actual work with their teams serving the clients and, simultaneously, working cooperatively with senior management (group managers) in order to implement new policies and practices.

The team managers felt anxious and there was scepticism and doubt as to whether the system was chosen because it addressed their needs or because of cost efficiency:

> *"There were a number of different companies that put forward a tender for the new system and we were all invited to attend demonstrations and to complete a questionnaire. We had the opportunity of asking various questions about how it is operated and all these were then fed up into the client project team I suppose, although it was a consultation, it wasn't our decision as to which system actually they agreed to implement. And I think a lot of results (are based) on cost…"TM1.*

The team managers also expressed the view that it felt quite authoritarian and oppressive when they had to send a member of their staff to take part in the procedures the project team was working on:

> *"You know sometimes it felt a kind of directive when people say you didn't send anyone to this or you have to do this and sometimes that felt oppressive because it was as if they [project team] were saying that we as managers we didn't understand the project team or the value of it and I think this is a bit unfortunate when at the same time [the project team] tries to give you opportunities and encouragement and that actually becomes counterproductive when it gets to the stage you've got to send somebody otherwise I'll be in trouble and it felt like that sometimes and I don't think that's helpful…"TM5.*

It was clear that in this quote negative emotions were expressed, against or confounding the construction or deployment of the system in hand. The perceptions of TM5, as shown above, illustrated also several managerial issues regarding task allocation and planning of staff activities, which TM5 had to resolve in order to be able to respond to the project team's requirements. It was also made apparent a kind of alienation between the manager and the organisation as the staff member did not feel that what the organisation did at the time was helpful for his/her team.

5.4 Participation

Table 5.4.1 Thematic Category: Participation	
Themes	Practitioners' participation in MIS development and implementation
	Practitioners' participation in decision-making
	Opportunities for involvement
	Difficulties in participating
	Involvement approach
	Giving and receiving feedback

The thematic category of Participation consists of six themes as outlined in Table 5.4.1. All groups of interviewees (practitioners, team managers, senior managers, and IT staff) discussed their perceptions of their own involvement in the decision-making regarding the MIS development and implementation process. In addition, the non-practitioner groups discussed the level of practitioners' involvement in the MIS development and implementation processes. They also commented on the involvement approach used and the opportunities offered by the project team for participation. Lastly the sub-theme of giving and receiving feedback was discussed as a factor, which could have assisted the MIS implementation process.

5.4.1 Practitioners' participation in MIS development and implementation and practitioners' participation in decision-making

Practitioners were able to identify the unique experience and contribution they could provide to a new sophisticated system by proactively seeking to introduce changes following the hierarchical structure whenever they think they need to:

> *"I think as practitioners we identify things we feel would be an advantage for us. As a team we are a quite proactive team; if we feel that there should be any changes in certain systems we will discuss it in our*

team meetings and address to our team manager any issues we thought that might benefit if they are investigated" SW4.

Practitioners were also asked about their level of involvement in MIS development and implementation processes as well as their role in decision-making within their organisation. The following quote clearly places the responsibility to the managers:

"I think it's mainly the decision of managers. As I said there are times when we want to be involved but it's down to the managers really. I think it would be good for us and for the clients …for years we hear about changes and nothing is happening and suddenly you hear that there are going to be changes and we are not involved in those changes, we just hear that those are the changes…" SW2.

With regard to the involvement of team managers in the development and implementation of the system, their role was perceived as dual; first, to identify the information needs of their team and second, to offer their views after attending various systems demonstrations on which system was the most suitable for their teams. Although there appeared to be an open environment of discussion, they did not feel it was their decision which system to implement:

During the early implementation stage the team managers realised how important it was to have taken part in the selection and development procedures. An important realisation for them was that they should have participated more because their information and recording needs were different from other teams or Adult Care.

The senior managers worked closely with the top-management of the organisation (e.g. Director) and with team managers in order to ensure services are provided to the clients and also provide the government with the necessary reports. The interviewed group of senior managers participated in the development and implementation of the new information system in different ways depending on their position within the organisation. Most of the senior management interviewees had quite an influential role in the project, by either participating in the work of the project board or by directly consulting the project team.

With regard to staff participation, the senior managers had a very clear picture of how many individuals were involved in the processes of implementing the MIS:

"One of the earliest processes we had to do is to specify the new system and that's where we draw on social workers and managers because they know the procedures and processes of a product. We had to work with them in order to specify the system we needed so they were involved in the process of specification and they were involved in the next processes of seeing demonstrations and marking them. They were involved then in the process, of drawing up the detailed business procedures which we use actually to customise the software…" SM3

5.4.2. Opportunities for involvement and difficulties in participating

This section presents the opportunities offered to practitioners to participate in decision making about the development and implementation of the MIS and discussed their perceptions about them.

The first quote presented below it refers to the lack of real opportunities and that these decisions are made above, which clearly shows that social workers do not participate in this procedure:

"I would say it's a decision made above. Sometimes maybe there are memos and stuff like that from the managers. They might have asked but how much is real, how much is taken forward it will always be a topic for debate but then managers will say it should be more. I don't feel like I am participating but then I am not paid to make those decisions but to work with the clients" SW5.

On the opportunities they had to participate in MIS selection and development processes there were some positive views:

"We've had opportunities to feed into it, we've tried to I think there is also some resistance to change and to seeing how is it going to benefit us because at the end of the day it has to be a tool for the job not the other way around so I think there were opportunities, how much we were listened to I don't know, because some minor things seem to have taken ages to resolve…"SW3.

The general feeling among them was that practitioners wanted to be more involved than they were.

"Two of the people who set up the system and its business processes came around to the team on two occasions; one to sort of identify issues or concerns we might have about the system and the second time just to give a flavour of it bring along the screen and show how it looks really…"SW4.

Team managers expressed very positive feelings about the project team's aim to involve and engage people with the new MIS. However, they thought that it was the individual's responsibility to take up all those opportunities in the best way they could:

> *"They (practitioners) were certainly encouraged to be involved. It was one of those bouncing things that they were asked to be involved but none ever suggested 'we will take a case away so you can go to all those groups'. The implementation group wanted practitioner input but the practicalities of being able to go to all the meetings was against the demands of the caseload and sometimes people think that real work is more important" TM2.*

But again, the lack of support, analysis and quantity of input needed were identified as factors which led to not participate in the procedures:

> *"The problem was I don't think people realise the depth of problems that could occur. And so necessarily the approach wasn't wrong but what was wrong was the analysis about how much time would be needed, how much input would be needed, how much training would be needed apart from a complete culture change and I think that underestimated the need…"TM4.*

The senior managers also recognised that there were difficulties in engaging staff due to workload. The issue of having the MIS separately developed for each group of services was also raised along with the concept of staff participation:

> *"I am not sure whether buying systems, which have already been created is necessarily the best approach actually, and I would been interested in maybe getting a contractor in to work with us to design our own system using something like Lotus Notes to create a front-end, which is completely about our needs and nothing else, you know, (so we) don't have all those bits adult services need or the health service might need or other departments want that they are bigger than us and it might be more expensive in the short-run. So, I think people on the ground and people at all levels in the organisation should be very involved from the earliest possible stage, that's my view" SM2.*

At this point, it was important to describe how the IT staff perceived the participation of social work staff in the selection and implementation of the new MIS:

> *"There were various workshops with practitioners, there were seconded practitioners to the project, one child care worker and one from adult services. There was a lot of work around business processes around current and new processes. Practitioners from different teams came along and said "this is how we work now" and had input to how they might want to work in the future; there was the training on PC. I think*

that sometimes social workers could have been involved more often. I think it was from other pressures of work or occasionally the reluctance of their team manager to release them in order to work on the project; often it's not their priority" IT3.

The lack of social workers' participation was explained by the lack of support for the project from team managers. They thought that it was essential for practitioners to participate but their team managers would not release them in order to participate. The above mentioned thought can be perceived as an example of miscommunication and lack of understanding between the project team and the team managers.

5.4.3 Involvement approach and giving and receiving feedback

Regarding the involvement approach used the practitioners believed that they were not listened to. This was explained by the practitioners as a result of not receiving any formal feedback from the management when they participated:

"I suppose our involvement is through team meetings every fortnight and the new system has come a lot to our agenda as we try to get to grips with it, get the system to fit our needs… the group manager is coming to team meetings quite often as well as the Head of Children Services is coming two or three times a year so there are ways of directly meeting people. I suppose it's more about feeling listened to rather than seeing people and getting your message across…"SW3.

Practitioner participation in decision-making procedures seemed to be another point where practitioners felt that they could be more involved but they were not:

"…people have been very involved right from the start in quite large numbers so it certainly is not like they come along and say, "OK, here it's your new system and you start next week". It's not that approach. But equally it's not at the other end of the spectrum where people come along and said, "OK tell us what sort of system you need". It's been something in between" SM2.

A differentiation in the perception of organisation's approach among the different teams was also observed:

"The organisation's approach was both consultative and participative; it was consultative to try and get people's views about it and it was participative in trying to get people involved in user groups, to get staff involved in some common things. I would be surprised if people were saying that it was successful across the teams; it was more successful in

some teams rather than others, some teams took up things sooner than others and some teams are still struggling" SM5.

This view stated that while some of the teams seemed to getting on with the new system others were really struggling. However, such difficulties, quite often occur, and persist until the system users get acquainted with it.

The IT staff interviewees presented a very different perspective. People who were interviewed in this category were working in the project team or on the management of ICT projects within the Local Council. These individuals also had various project roles for implementing the new system either at the early or later stages, or during the entire project. IT staff also planned and carried out the staff involvement approach for implementation of the new system. The IT staff's perceptions were that they considered practitioner's participation crucial in identifying the information needs and requirements. Practitioners were offered opportunities for consultation, however, they pointed to inadequate feedback from them:

"…most of us in the project have been sending out information with drafts of our work for consultation with teams. I have to say that was not terribly successful in the sense that we don't often get a lot of feedback from the teams partly because they are busy.., However, the results of that are now becoming apparent since we went live with the system. People say "we were never consulted for this, why you did it this way?"" IT1.

The conclusion of that interviewee was that although the project team tried to involve staff they chose not to be involved:

"…actually they were consulted but they didn't choose to take the opportunity and now they have to live with the consequences of that." IT1

The transfer of responsibility to the staff, who did not take the "preferred" option of collaborating with the project team, indicated that the procedures followed did not offer optimum possibilities for staff to take part and give their feedback. Busy professionals like social workers who usually are not very familiar with ICT, need more time, for instance, to understand what the consequences of having a new system might be for their practice. The project team did not seem to have taken that into account or if it had, it did not appear to have assessed the situation properly. It can be argued that this attitude may result in social workers

having to *"live with the consequences of that"* on top of all the other stuff they carry out in their daily working practice.

IT staff also highlighted the role of team managers. They believed that they could have been more helpful with implementing the organisation's plans:

> *"…and I think one of the other problems we might have is that team managers haven't been wholly on board with the work. It will be helpful to have the managers on board give them more training and have them being more enthusiastic about it and lead their teams from the front. There isn't a feeling that this is happening and that's a disappointment for those of us on the project team certainly... There are only a few enthusiastic managers who are getting their team organised and they are all quite enthusiastic. There are others who are less and that is a shame" IT1*

IT staff asserted that social work practitioners did not participate as much because team managers sent administrative staff to attend the meetings:

> *"I think the frustration particularly with the children and families side is that we invited a lot of social workers to the section meetings and the children and families sent an admin person along instead, which is not any good because we know that admin will deal with any system you give them on the whole…" IT4*

Thus, the theme of participation was explored in terms of the extent of involvement the different groups of interviewees had with the MIS's selection and design. The interviewees stated that whereas opportunities were available various constraints such as increased workload and lack of time did not facilitate end-users involvement. It was also recognised that some teams better utilised the opportunities and according to IT staff that depended on how much team managers promoted the success of the project in their list of priorities. IT interviewees also stated that it was also down to each, different employee how much they wished to participate or not. Participation was also explored in relation to giving and receiving feedback from the project team to the end-users, i.e. practitioners and team managers, and the converse.

5.5 Management Information System

Table 5.5.1 Thematic category: Management Information System	
Theme 1: MIS Advantages	Increased effectiveness
	Accuracy of data
	Increased performance scrutiny
	Saving/freeing up time
	Allows more structured responses
	Informed planning and practice
	Better work load balance
Theme 2: MIS Disadvantages	Work Difficulties related to MIS
	Increase administration & workload
	Technical problems
	Complex processes
	Social work deskilling
	Time away from clients
	Reduction of professional relationships
	Not service improvement
	No practical use for social work practice

The thematic category Management Information System consists of two main themes as Table 5.5.1 shows. In turn those two themes comprised of subthemes derived from the interviews. The first theme presents what the interviewees stated as advantages of the MIS for the delivery of social services, while the second theme captures the disadvantages as they were identified by the research participants. The research findings are presented and discussed by role-type.

5.5.1 Advantages of MIS

In the first two months of the system's implementation, when the interviews were carried out, the practitioners did not identify any major MIS effects in services provided, but rather in the nature of the work, primarily the way social workers were asked to carry out their tasks, since the MIS was implemented. The practitioners believed some of the MIS's effects were making the form of their response to the clients' needs more structured and data more accurate, as well as improved communication among teams.

> *"I think systems can help you focus on your work I think to a certain extent they make you become very clear about the process, which is very helpful they are not created though to work with people and when you have a lot of ticking boxes and categories people don't necessarily always fit into that so the information you input is inaccurate, not completely but..." SW1*

For practitioners in Case Study A identifying advantages resulting from the MIS was not so easy, probably because at the time of interviewing the system was not in operation. They were more concerned with the difficulties they were going to face and the time needed to adjust to it and the changes expected to occur for them in their daily practice:

> *"It will take time to adjust into the new model [of work] and I think that it's process that needs to happen, like all the awkward things it takes time to actually take place. We have put in place additional help for those who are struggling and I am one of those. I think struggling in the sense of coming to terms with the latest IT version the expectations of what's made but also using the management information to produce additional data for other people so they can view it rather than make a phone call and that takes time." SW6*

For team managers a great advantage of using the MIS was that they would have access to files and cases in more organised and efficient way, which of course relates closely with previous points about scrutiny of practitioners' work:

> *"I hope it will give more efficient organisation because things will be much more centralised and much more accessible rather than having, you know, loads of files all over the place and pieces of paper sticking out. It all depends though, I mean I think it heavily depends on practitioner input and I think that's a big assumption there that it will work" TM1*

They were also quite positive about the MIS's outputs in terms of performance monitoring and management, accuracy of data, and efficiency of their teams:

"Well I think it will be dishonest of me not to say it will increase my scrutiny of how people are working. So, I think there is a real emphasis on performance because at the moment I am currently relying upon supervision, both formal and informal, to see how people are progressing with the case work, this means I am going to have my eye on the cases much more; a lot more than I do currently and I think that is quite alarming for some social workers…"TM1

Team managers also argued that up-to-date information would inform service planning and social work practice by knowing, for example, what kind of cases practitioners had at a certain point of time:

"You might be very informed but you won't be necessarily any wiser. There is a difference between information and wisdom."TM5

On the contrary, there was the belief that the system was going to enhance social worker's analytical skills and make them more critical of their practice:

"I think one of the saddest things I find is that social workers work really hard but they don't have the ability to actually record the critical and appropriate things; analysis is a skill and that's the skill I often see lacking in the recording. So, I am hoping that skill will be increased and be more evident…" TM3

Another expected advantage of the MIS was the teams' response to clients' needs, which expected to be improved and also team managers expected that service quality will be improved as well:

"Our response to certain people and certain client groups that can move things on and improve the quality of life of children and families."TM2

Senior managers' views were quite different from the previous groups with regard to MIS's effects in terms of their personal context of work and for the organisation in general. According to them, management processes will be improved from the bottom of the organisation to the top:

"It clearly gives you information, enables you to collect information about a whole range of people and not simply about individuals so it enables you to spot trends or changes ……. so actually information tells you about the quality of your services and it certainly can tell you a lot about what actions you are taking …"SM1

Accuracy and quality of information were identified as important issues because they would facilitate their work:

"Look into individual cases so both in terms if I am asking for a decision I can read the assessment and read the information and see if the decision is justified other than just relying on what people tell me on the phone or an e-mail… Make better decisions I hope but at the same time

look at the records and see how good they are and comment on people's work. And particularly because I have got the lead responsibility for looked after children in care I need to look at reviews, I need to look at care plans and I can do that more systematically"SM3

Senior managers also expressed the opinion that using the MIS will inform practice and help practitioners make more rational decisions based on accurate information:

"So social services and social work in the past has always been very poorly researched, very little evidence-based. People are introducing new policies on the basis of hunches and good ideas rather than the basis of actually looking at what happens to people. I believe information is important because it informs you about what actually is going on and lead you to more rational decisions about changes to be made to organisations and services." SM2

They also discussed the utilisation of time as well as accuracy of information:

"One of the difficulties or reasons we are replacing our system and wanting to have practitioners putting information directly into the computer is because there was always room for both a lot of delay and mistakes and people are writing things on forms and somebody else is taking from the form and putting into the computer so well always had to do an enormous amount of work in getting people to check back on the accuracy of what they have been putting into the computer." SM1

In a similar vein, they believed that information sharing as well as standardisation would be increased:

"Better information sort of sharing and more accurate, more detailed each time they are looking at a particular set of forms but it should also lead them to follow standard processes more often."SM3

Finally, senior managers identified that the implementation of such system would enhance their communication and decision-making across teams as well simplifying currently followed procedures:

"Requests for decision, which I need to make routinely will come to me electronically all the time and that's interesting because I've put quite a lot of work into asking people to send me e-mails and some people do and some people don't. And I respond quicker than they e-mail me so people should be learning, you e-mail me you get back a response, it will all come through the system now I hope, so that will change how I work.."SM3

The IT group also identified a number of 'advantages'. MIS could assist the organisation and its staff at all levels of the hierarchy; starting from increasing effectiveness and staff performance, moving on to collecting precise data, and

managing information. That would potentially lead to the provision of the DoH with accurate returns and statistical reports:

> *"Once the data is in the system and we are giving them pre-populated reports so if they need to go and do an assessment they print off the assessment form and already got the name, address etc".IT4*

The same interviewee also believed that social workers were expected to gain more time spent before on doing paperwork, which they can now spend with their clients:

> *"All the basic information printed in there so they have only to go and do it and come back with new information and put that in…it will save a lot of the form filling they used to do" IT4.*

IT staff interpreted efficiency as follows:

> *"Managers are going to be able to see what the social workers are doing because the management view of the system allows them to see every single social worker and where they are with every case, and whether are up-to-date or not. They will be able also to move cases electronically so they can see who is busy and who is not. It is actually based in real information rather than in a perception "John is busy or Maria is quiet or whatever"… They will not be able to hide now because I know that some social workers whereas in life they make a good impression of being busy and nobody ever challenge that. Now you will able to see who is busy and who isn't. I think from that point of view it will help" IT6.*

According to the above quote, team managers are offered more options on case allocation as they will know from first hand what practitioners do and to what extent they are occupied. The quotation raises another important issue, namely that of the 'image' social workers have given to the organization in Case A. According to IT6 social workers give the impression of being busy and no one is able to challenge that. On the one hand this impression could be correct but on the other hand it could diminishes social workers' professional role because it shows that other employees in that organization believe that social workers are not as busy as they look. Additionally, the above quote confirms the fear of practitioners about having more scrutiny of their work from their superiors.

5.5.2 Disadvantages of MIS

It is crucial to note here that although they could name the long-term results of introducing MIS for the organisation and for their team in particular, practitioners could also identify disadvantages for them in the near future. Practitioners recognized the work difficulties related to MIS with the most important being the decrease in time spent with clients and as a result, the conflict over spending less time with clients and more on updating computer records. All six practitioners agreed that working with the system means (for social workers) increased workload and administrative tasks. One practitioner noted a feeling among social workers of being deskilling and/or under-using core social worker skills by asking them to work with computers so much:

> *"I didn't come to social work to become an IT person. I came to social work to work hands on with clients to make a change if possible within that family to promote the wellbeing of their children and do that hands on, do that in the client's setting, not from my office…"SW4.*

Practitioners also considered that the system was not there to facilitate the social worker's job, but rather the manager's role and the Local Council's work, and their returns to the government:

> *"But my view is that it should list my needs, managers' needs, the council's needs the system will look differently, and my view is that the system very much meets those needs rather than mine so I am trying to stay hopeful not to be bitter and twisted…" SW5.*

With the introduction of complex processes, practitioners did not think that the system was implemented to serve the needs of practitioners, but rather to meet recording and monitoring needs, which would help the management of the organisation to achieve accountability goals by increasing the scrutiny over practitioners work:

> *"Of course the whole point of recording is about accountability obviously and I think this system is about accountability so managers can see and check upon what you are doing, they could read the file but how many times do people read the files" SW2.*

Team managers also raised issues of work difficulties related to MIS use. One of the most important was the unresponsiveness of the system to actually meet their team's needs so they had to invent other ways of coping with the new business processes. Secondly, the system was based on a tick-box structure, which cannot capture the depth of what social workers would like to have written down

about a particular case. It had also been associated with the removal of professional discretion or shaping responses to pre-determined assessment questions and, therefore, the deskilling of social workers:

> *"I think that the cynicism amongst others, that there are a lot in social work who will see this as a very complicated agenda to get rid of costs of administration and you have been in an entire self-contained workstation where you do all the inputting, everything is down to you and so you will become a very efficient holistic worker rather than a social worker, a therapist or practitioner and that's what they feel." TM4.*

According to the above quotations the increased administrative load placed on social workers after MIS implementation created workers who are efficient and flexible and worked at "self-contained workstations", which could result in social workers being alienated from one another and probably their team and of course their clients. The last phrase in the above quotation also raised a fear for practitioners who might be feeling that their professional identity was being threatened.

Similarly another team manager stated that transforming social care organisations into "call centres" reduced human interaction, instinctive judgement and human behaviour management; three very important aspects of social work practice might, therefore, be lost:

> *"When you introduce a format that virtually makes you feel like a call centre then essentially it takes away to my mind the human element a lot in terms of relationship forming and instinctive judgement and human behaviour management."TM5*

Senior managers did not identify any major disadvantages of the system for themselves in particular but they did raise concerns about the practitioners and, in general, staff who avoided dealing with the system because they believed it was imposed on them:

> *"I think at the moment there are still some staff that see the system as something out here that they've actually to respond to it which is imposed upon them and they really would rather not have to deal with it"SM2*

A concern was raised about the quantity of information, which would be gathered. They revealed some anxiety about their capability (regarding the time consumption) to separate useful from the non useful information. As information gets more and more essential for one's work this could create anxiety for people

and the tendency to know more and more because the MIS will give them access to information they previously did not have:

> *"My worry and it might not be a real concern is that I am going to be inundated with the information and not be able to identify what I need to have and what I don't and that will cause anxiety because I will have then to differentiate things I need to know or I will have the tendency to want to know too much because suddenly I will have available to me information about workloads, which I haven't always had. This kind of thing and how much of my time should I spend going into that rather than doing other areas of work so I am just not sure". SM4.*

IT staff also pointed to a number of problematic areas, due to the expected period of the implementation process as well as the impact of MIS on service outcomes:

> *"I don't think it has an awful lot of impact, the work is still getting done I suspect if anything is slipping from the system at all it's the inputting to the system... We've had teething problems with certain parts of the system so people have to keep paper records whether we like it or not, we do expect them eventually to input the information they've got on paper into the system. But in terms of the actual outcomes of assessments and on-going work it takes people more time to do the computer work…" IT1.*

Concluding this section of analysis for Case A it is important to highlight that there were several areas within the organisation characterised by differences across the groups of interviewees on how the system was going to assist the professionals and who was going to benefit most from it. On the one hand, for social work practitioners the system created ethical dilemmas some of which the rest of the groups were not able to identify fully. It was also discussed among the groups that the MIS was going to improve several areas of their work but this was going to take time until all of them could fully adjust to the system as part of their daily practice. On the other hand the IT staff expected that the system was going to achieve better performance and control of professionals and accurate records for funding and statistical purposes without being able though to frame the time scale this could take place.

5.6 Social Work Practice

Table 5.6.1 Thematic category: Social Work Practice	
Themes	Practitioner's data input effect on social work practice
	Paper versus computer culture
	Managing changes in Social Work practice

As Table 5.6.1 shows the thematic category of Social Work Practice consisted of 3 themes. The aim of this category was to identify how social work practice had been influenced because of MIS implementation, if there were any major changes, and how practitioners, team managers and senior managers thought those changes could be managed.

5.6.1 Practitioner's data input effect on social work practice and paper versus computer culture

The aim of the first theme in this category was to discuss how input of data by social work practitioners affects social work practice and how the organisation changes from paper to a computer culture. As discussed earlier in the thematic category of management information system, practitioners were allocated the duty of data entry into the system, which is an important organisational change because up until then this was the duty of administrative staff. The interviews revealed the transition of social care organisations paper-based to computer-based culture, which also brought along changes in the practice of social work as well as in the organisation itself:

> *"I think systems can help you focus on your work. I think to a certain extent they make you very clear about the process, which is very helpful. They are not developed, though, to work with people and when you have a lot of tick boxes and categories, people don't necessarily always fit into that, so the information you input is inaccurate..."SW1*

Team managers, senior managers, and IT staff commented on change resulting from the implementation of MIS in social work procedures. In particular, interviewees noted the change from a paper-based system to that of a computer-based. Their social work teams were asked to keep up-to-date computerised files

by inputting their own data, communicating with other teams through the system, and in general practicing social work differently from what they had been used to so far:

> *"I think practitioners found it difficult as everything is getting computerised when they wouldn't be trained to be administrators and typists so they found that hard; they came into social work because they wanted the interaction and to actually do the practical job. I think the changing of thinking takes time…"TM3.*

In contrast, they noticed that although change had occurred, it did not mean that the teams would stop working with their clients during the implementation period of the new MIS:

> *"We still have to go on providing services to families that doesn't stop; we can't put that on hold in order to be much more competent implementing the system." TM2.*

5.6.2 Managing changes in social work practice

Senior managers also discussed the depth and the impact MIS would have on social work practice. They gave emphasis to the transition from administrative staff information input to practitioner input. They were very aware of possible resistance to IT, which was identified by senior managers, but for them, was not considered as a very serious problem as they expected their staff to recognise, quite soon, the benefits of using the new system:

> *"Inputting information is going to be a tremendous struggle for them but we know from other authorities that once they get over that hump the benefits start to occur because they are working all the time on up-to-date information in their computers and they can tell the tasks they have to do or not to do... There remain some people who say using a computer is not part of what a professional should be doing…" SM3.*

They highlighted a transition from an unstructured and less disciplined manner of working to a more structured way of carrying out the work:

> *"I think this is going to be an enormous change and I haven't quite got my head around just how significant this is going to be because this is not for me a record system; this is a completely different way of doing the job and I don't know how much people fully appreciated that. It's going to direct people's work in a way that social work has traditionally been what I called, a more libertarian type of profession you do what you want when you want to do it. And I think this will structure people's work in a more disciplined way" SM4.*

The realisation that social work practice was going to change with the deployment of the new MIS was a first step towards accepting the changes the MIS was going to introduce in the organisation in general. Senior managers believed that the system would assist people to be more effective about the services they provide and also work more with the client:

> *"I also imagine that those people get more proficient at working the system that will enable them to spend that time to do direct work but I also think that it will be helpful in terms of helping people think more clearly about the practice and what they are doing... I mean the system demands a time scale and process that is based on research about what service users need, about clarity of thinking and about timescales and process…" SM5.*

The IT group referred to the training sessions they provided for the social workers. They believed that although the training on the new MIS was adequate enough to support this kind of change, social workers still have to deal with overload, which would include work previously done by administrative staff:

> *"A lot of social workers can do a lot of the actual typing on screen fill in forms whatever but their time could be saved by having the biggest pieces of written work, such as long reports, court reports, assessments reports or whatever, actually typed by admin staff. There is a big impact on social workers I don't think we've got the balance right between how much the social workers do and how much the admin do." IT1*

The IT group believed that the impact of those changes had not been realised by social workers yet, as the implementation had not begun, and they expected some sort of crisis in the future:

> *"We are almost through now the intensive training and the run up to implementation and a lot of people actually got to the point of going along to training with no real idea of how the new system will impact on their traditional ways of working. Even after the training some people had an expectation that they would continue working in the same way and the system would just enable them to do that rather than realising that inevitably a system represents profound changes as these would affect their own day-to-day practice. Some people still have not thought that through, others experienced this as a profound shock and find this quite disturbing" IT2.*

The above quotation brings again into the discussion the lack of communication among the various groups of stakeholders. The IT staff believed that social workers had not comprehended the impact of the new system on their practice whereas previously it was illustrated that this was their main concern.

For the IT group of interviewees the way social workers used to practice was under scrutiny and particular processes of carrying out the actual work had to change in order to be adjusted into the new system; not the other way round. It was clear that social workers realised this and in some teams wanted to try and keep familiar processes instead of employing new business processes:

> *"It was found that there is an official process, an official child care process and an official adult care process but on the ground the process that the practitioners used in a day-to-day basis was not the official one so when you have people like managers in the planning area of social services would say "we assessed the process that social workers use; these are the forms they use, these are the systems they use" but that was not actually the case because social workers were found regarding the official process not to be doing the things they wanted to do; so they developed their own forms or they did things a bit differently or using excel spread sheets instead of the old system. So it was an interesting comparison between what people thought was happening and what actually was happening" IT3.*

However, in this case resistance to new business processes has led social workers to use processes, which they had tested over time and that had worked through the years.

In concluding this section the main issues raised by the research participants are as follows: Firstly, there were changes in social work practice which were located mainly in the area of having a more structured way of working. Because of this practitioners and team managers discussed quite extensively the degree of social work transformation from a self-directed professional activity to a business-oriented task. The fact that managers' work is facilitated in terms of performance monitoring, accountability and achieving tasks was also explored. However, all the groups of interviewees agreed that in part the new system was going to improve the work procedures but it was not anticipated to improve service outcomes for the clients in the short run but after a time of full adjustment of the MIS in the organisation's structure and culture.

5.7 Organisation and Organisational Knowledge

The last set of questions was related to the way agencies handle and disseminate the explicit and implicit knowledge gained from daily practice. The intention was to explore any existing mechanisms for storing information and then

disseminating it within their organisation and vice versa. The discourse of knowledge, identification of knowledge, ways of storage and implementation were identified as unfamiliar, especially by practitioners. However, when practical examples and clearer specifications were given it was much easier for them to give accurate answers and express their views. The final thematic category of Organisation and Organisational Knowledge included the subthemes of knowledge generation and management, organisational learning and skills sharing and information sharing as shown in Table 5.7.1.

Table 5.7.1 Thematic Category: Organisation and Organisational Knowledge	
	Knowledge generation and management
	Organisational learning and skills sharing
	Information sharing

5.7.1 Knowledge generation and management

Practitioners believed that team meetings and supervision were the main tools for knowledge generation:

> *"I think we do that [knowledge and skill sharing and client information sharing] by verbal communication, we do that by joint visits; I think we do that by listening to each other's experiences not necessarily by sitting and reading on the computer, I mean you can do that and I guess there will be people that will access files and information and that will be valuable. But certainly with respect to this team I think the verbal communication, the experiences that people can share, the joint visits it's where we learn from each other and where we value each other's opinion really" SW4.*

Similarly it was difficult to see knowledge for practitioners deriving from the MIS:

> *"Not really. I don't want to be negative as I don't know what is going to happen at the end but it's hard to see that [knowledge creation] for our team in looked after children. Maybe for the Referral and Assessment team where they start to see patterns but it's hard to see what patterns …" SW5*

The team managers' views were differentiated regarding MIS and knowledge generation and management. They recognised the possibilities of MIS becoming a tool not only for recording cases but also for generating knowledge. This seems to be an important and positive element of the system with regard to

offering to professionals the possibility for aggregating information, linking and accessing Web resources and providing them with helpful reports:

> *"If everything we've got is on a website, is in a sort of electronic form, then one can organise according to the different areas to look at, we have a number of files, which have different pieces of information inside, fostering, drug use, child protection, local services and all those different bits of information that you need to keep up-to-date. I mean it would be very helpful if we were able to have a MIS, which could say how to assess for example, drug using parents, what's the latest on that, click, click and there it comes, that would be very helpful to be able to discover those things but that is going to take a lot of time and that's the problem"TM6.*

Regarding knowledge generation emphasis was given to peer supervision and training, rather than to technology:

> *"No. I think you get that from supervision and actually sitting down and thinking what you are doing from research, from discussions within the team, from training, I don't think that comes from technology, no" TM3*

It was also mentioned that the MIS might record information about practitioners' work but it would not be able to explain or justify what they do:

> *"Here is an awful danger of being prescriptive; you have to do this and this without anybody actually saying why this; and this improves the service we provide and I think we can become slaves of the system as opposed to using it as another pen and paper. It's recording information, it's recording what we do but it's not what we do; what we do happens out there when we visit people, when we talk to people, when we have meetings, when social workers sit and think for someone for a half an hour… Technology just records that" TM3*

In terms of knowledge management two of the senior managers had difficulty seeing how the new system was going to facilitate it while the rest of them had a broad idea what the organisation could acquire from the system mainly in terms of knowledge management:

> *"I think one of the things which are really good about the system is that it is not just creating a record but it is also about communication. So the communication is built in, decision-making processes are built in; the system is built around sending messages between people that they inform part of the record. So, that's a real strength and it should help people to get clearer about some of those processes where they have been built in to the system properly" SM3*

IT interviewees also recognised the value of knowledge. They highlighted the importance of having access to knowledge. They admitted that such a scenario can be a realistic one, as long as practitioners understand the worth of their inputting into the system:

"It's a system, which carries a lot of the activities of social workers so we know a lot of what they are doing. I suppose we should know more of what they are doing. So, yes I can a see a big quantity of information. But how we use that and how the social workers use the system to enter information is the most important point" IT6

The last set of questions was related to the way organisations handle and disseminate the explicit and implicit knowledge gained from daily practice. The terms of knowledge, identification of knowledge, ways of storage and implementation were identified as unfamiliar, especially by practitioners. However, when practical examples and clearer specifications were given it was much easier for them to give accurate answers and express their views.

The utility of the new system for translating individual knowledge into organisational knowledge was also identified:

"I know that in one s team a lot of the knowledge about their clients is in the head of one person; so when it comes to carrying out a particular procedure they ask that person; so that person thinks those are the needs of this child, so we do that etc. So if that person fell off a bus tomorrow that knowledge is lost. I think what the system tries to do is to formalise that matching process a bit more" IT6

In general it could be argued that the idea of generating knowledge through MIS utilisation was a very complicated issue mainly for the groups of professionals whereas the IT group had a broad idea. This could be explained as that probably at the time of interviewing they were really under pressure with the implementation so they could not take a long-term view.

5.7.2 Organisational learning and sharing skills

Different views were expressed about organisational learning and sharing skills among the professionals:

"I guess in this team we are very good in informally sharing experiences and peer supervision, pulling ideas, learning from each other and doing lots of things" SW5

A team manager identified the informal processes as the main and only successful factor for organisational learning, compared to the utilisation of a computerised system:

"The information in terms of doing our work better is much more informed by the individual work, which has been done, the sort of case,

which has got particular lessons for us like care proceedings, which results in a certain way, a case of a child who has gone home and that has succeeded and looking at the elements, which worked in that and techniques which were used but I don't see that system providing us with that, I think that's about individual work" TM1

However, they admitted that, quite often, information which derives from practice is not always used as a learning opportunity, but as a means for monitoring accountability of both practitioners and teams:

"It informs practice on the ground but sometimes it feels that the information is used to beat us over the head with in terms of you haven't met your timescales and so on rather than looking at how the information has informed practice and increase the existing skills of front-line staff" TM2

Senior managers were also very skeptical about using MIS as a learning tool for practitioners. They mentioned it was possible, depending first on knowing very well people's different learning styles and determine all the possible ways practitioners would need to extract information from the system:

"…It's the analysis bit that is important, I think. The PC is not going to do the analysis; it's not going to say what the info means. So whether it helps people would depend partly on how those people work and how they learn and everyone learns differently. So, I think one of the things we are going to have to do is to help people find all the different possible ways of getting the info back-out when they need it to sort of arrive at an understanding"SM3

This section presented the views of the three groups of interviewees regarding learning and skill sharing with the utilization of the MIS. Their views varied but in general it could be argued that their perspective was that some aspects of social work, like learning from each other or from good practices occurs through the face-to-face interaction with the clients, in supervision and within teams.

5.7.3 Information sharing

This topic focused on information sharing among agencies and methods they have in place (formal or informal) to exchange information. More, specifically, interviewees were asked to express their views about any possibilities the new system may offer to them to increase collaboration. The first impression was that all interviewees had realised that the new system will assist in sharing client information (files) with other organisations (e.g., Health Service):

> *"I think it will [assist collaboration] when it's all up and running and all inputting and sharing files; I already have gone into a client's file and someone else has been in and written some info in the observations although I didn't speak to that person…" SW4*

For senior managers were also indications that the system will facilitate the communication of the organisation within intra and inter-organisational levels. The exchange of information about clients with other organisations was a primary goal they all want to achieve in order to secure better quality of services:

> *"The next major thing is how it links with other organisations particularly the health services because we already begin to do things like integrate our Mental Health services or integrating our learning difficulties services with those of health this year and probably in the years to come we will be having closer relationships with those parts of health services…"SM1*

In a similar vein, the IT interviewees could recognise the potential of the system to assist staff in sharing information and knowledge provided that the MIS would be expanded in the future:

> *"It is a top-down thing that here is a pattern of events and you are expected to follow and then just it is populated with the outcomes. It doesn't go beyond that. It doesn't allow social workers to say what will happen if I put this bit of information in here. Maybe we could use that to expand the system at some point" IT6.*

Looking at information sharing as a determined clarification of one's ideas, insights, solutions, experiences to another individual or organization via an intermediary, such as the MIS, it was identified as goal that could be achieved in the long-term. Practitioners and team managers believed that they share information and knowledge through team meetings, joint visits and supervision sessions. IT interviewees could indentify possibilities offered by the new system for knowledge generation and management but they also stated the propositions for this to be developed in the future. Also, a primary constraint on individual's knowledge sharing behaviours might simply be time due to increased workload, which was raised as a main factor several times in this research and related to all research themes.

The research participants' ideas and perceptions were encapsulated in a case-ordered meta-matrix following below which aims to displaying date in an organized, compressed way so that conclusions can be more easily drawn as well as to facilitate the cross-case analysis following in Chapter 7.

Case-Study A	**Case-Ordered Meta-Matrix** **Thematic categories with interviewee groups**			
Thematic Categories	**Social workers**	**Team Managers**	**Senior Managers**	**IT Staff**
Practitioners' and Team Managers' Feelings about the new MIS' Implementation	1. The MIS created anxiety 2. Not sure if the MIS was going to serve practitioners needs 3. Frustration about the time and effort needed to work with the MIS	1. Anxiety and doubt whether the system was chosen according to their needs or because of cost efficiency 2. The approach used felt to be quite authoritative	---------	----------
Participation	1. Limited participation in decision-making due to workload 2. They are asked about general issues 3. They feel that they are not listened to because they do not get any feedback 4. Line management is accessible	1. They identified information & recording needs 2. Not sure how much their views were taken into account 3. Lack of time & caseload constrain participation 4. Opportunities to engage were given but it was down to individuals how they would participate	1. Practitioners were involved in various ways 2. There was a planned approach to involve practitioners 3. Some teams were more successful than others in utilising the approach	1. Staff consultation did take place utilising various methods 2. Staff chose not to take the opportunity to participate 3. Team managers did not support the project=less participation for their staff
MIS	1. Changed nature of work 2. The way system works is in direct contradiction with the way social workers would like to work 3. It is a recording & monitoring tool	1. MIS improves accountability, monitoring performance, reaching targets & timescales 2. Informed planning and practice 3. Improved team's response to client needs 4. The MIS reduces human interaction, instinctive judgement and human behaviour management	1. Managerial processes are enhanced 2. Managing the teams was easier 3. Data & information was more accurate	1. Increase staff effectiveness & Performance 2. Collect precise data 3. Managing information $\Rightarrow$ accurate DoH returns 4. Not a great impact on the service outcomes

Continues to next page…

Case-Study A	Case-Ordered Meta-Matrix Thematic categories with interviewee groups			
Thematic Categories	**Social workers**	**Team Managers**	**Senior Managers**	**IT Staff**
Social Work Practice	1. No major changes in service outcomes 2. Changes in how social workers deliver their work 3. Structured approach (tick boxes) 4. Social workers become deskilled	1. TMs job becomes more bureaucratic, more managerial 2. Monitoring staff performance was easier now – Control 3. Service planning & practice was informed from the information gathered 4. Information does not produce wisdom 5. Cultural shift from admin to practitioner inputting	1. Staff has to follow the processes in more consistent way 2. Decision-making was facilitated through the system 3. Libertarian vs. structured ways of working	1. Not a great impact on services outcomes 2. Day-to-day practice changes 3. Social workers get to use the official business processes now
Organisation & Organisational Knowledge	1. Organisational learning & knowledge through supervision & team meetings	1. Communication between teams was enhanced 2. Conflict over implementing the system & running the service 3. Organisation was not given much choice over the system 4. Information sharing & knowledge generation can be improved	1. Organisation was going through a deep cultural change 2. Whether that change will be successful depends on how much people will resist to IT 3. Communication was facilitated better in inter & intra-organisational levels	1. Transfer to a computer-based culture 2. From admin input to practitioner input 3. Staff did not adjust with the new business processes 4. If the system expands, it can provide knowledge 5. Data quality is a prerequisite for knowledge generation & access to it

Table 5.8: Case-Ordered Meta-Matrix – Case-Study A

5.8 Conclusions to Case Study A

The aim of this chapter was to present and discuss the research findings within Case Study A. For the first thematic category of Practitioners and Team Managers' feelings about MIS Implementation the analysis of the research findings illustrated that both the interviewee groups felt anxiety and doubt about the new MIS' implementation. They also wondered whether the MIS was going to serve their personal/professional and team needs. Team managers expressed doubt as to whether the system was selected because of its capability to respond to their needs or it was selected because of cost efficiency. However, both practitioners and team managers felt frustrated with the time and emphasis given to the system. Team managers in particular perceived that the whole procedure of implementing the new system was based in an authoritarian "top down" approach which for them was unhelpful in engaging practitioners and teams.

The second thematic category of Participation referred mainly to the interviewees' participation in the procedures surrounding implementation of the new system in Case Study A. The different position of each group within the organisation made a difference to the degree of their involvement. For example, the IT interviewees had maximum involvement because they were the staff responsible for carrying out the implementation for that particular organisation. Practitioners who were intended to be the end-users of the MIS, were invited to participate in various meetings, workshops etc. planned by the IT staff. In general, all the four groups of interviewees agreed that practitioners should have been more involved than they had been in order to adjust better with the new MIS and the changes it introduced into their practice. The groups disagreed on whose responsibility it was to involve practitioners and how. For example, IT interviewees claimed that there was a planned approach to involve practitioners but that they and their team managers chose not to be involved. In contrast, practitioners did not feel that there was a planned approach to involve them because even when they took part they did not receive any kind of feedback so they did not know whether their input helped or not.

The third thematic category referred to the MIS itself. This category consisted of two subthemes MIS Advantages and Disadvantages, which encapsulated the interviewees' perceptions about what the MIS was going to offer to the service and their team's practice in particular and its potential to function as a negative factor and create difficulties. Across the three groups (TMs, SMs, IT) it was identified that the MIS was going to improve accuracy of data, quantity and quality of information and as a result it was expected to improve accountability. It was also illustrated that management and monitoring of staff within the organisation would be improved, and that one might expect it to improve staff performance and

efficiency. In contrast the group of practitioners thought that the MIS was going to be used as a monitoring and controlling tool for them by the management and to increase managerial scrutiny of practitioners work and practice.

The impact of the changes introduced by the MIS on social work practice was explored through the forth thematic category of Social Work Practice. In this category there was a major similarity identified across the four interviewee groups and this was their notion that social work practice was undergoing major changes because of the MIS and that these would provoke other changes that would need to be assimilated in order to operate an efficient and effective service. Not unexpectedly, each group considered these changes and their potential impact only from their own job perspective, and their position in the organisational hierarchy. For example, the expected changes for IT staff were considered very positive because they would make social work more structured and thus more controllable by management whereas at the same time information would be available to managers at the click of a button. However, what was for them a more desirable structure for social work practice was not received with the same enthusiasm from the other three groups of interviewees. Although they agreed this change was going to happen they were quite cautious about whether it would be for better or for worse.

Finally, the last thematic category of Organisation and Organisational Knowledge aimed to feature the research participants' perceptions in creating, storing and disseminating organisational knowledge within the organisation using the MIS as a primary tool of inputting data and extracting information. Organisational learning, skills sharing and information sharing with external organisations were also explored. In this category it was noted that the three groups (TMs, SMs and IT) because of their position in the organisation could identify more opportunities for organisational learning and knowledge creation via MIS whereas practitioners thought that organisational learning and skills sharing takes place through procedures such as supervision, team meetings etc. Although practitioners were going to input data into the MIS for themselves, it was difficult to think how the extracted information could lead to creation of organisational knowledge for them.

Chapter 6 proceeds with the within-case analysis of Case Study B based on the same thematic categories as Case Study A.

CHAPTER 6: Case Analysis, Interpretation and Discussion of the Research Findings – Case Study B

6.1. Introduction

The aim of Chapter 6 like Chapter 5 is to gain familiarity with the research findings in order for the unique patterns within Case Study B across the groups of interviewees to emerge. The research findings from the exploration of how social workers, team managers, senior managers, and IT staff experienced implementation of MIS in this particular social care organisation (Case Study B) are presented and discussed. For Case Study B, five social workers, six team managers, six senior managers, and six IT staff were interviewed. As with Case Study A, the findings are outlined under thematic categories and subthemes by role-type.

6.2 Profile of Case-Study B

The participating service for Case Study B was the Adult Services. There were four social work groups from which three took part in this project. Each group consisted of one to five different teams. The council offered community care services to older people, physically disabled people, people with learning difficulties, and people with mental health problems Twenty-three people were interviewed in total: six senior managers, six team managers, six information managers, and five social workers. In 2005, the service was given a two star rating with the adult services designated as able to ‘serve people well with possibilities for improvement’. The services offered include:

- Practical help - to make it possible for someone to continue living at home. This could mean people coming in regularly to help or providing equipment or home adaptations to give someone greater independence
- Day care - to help and support
- Residential care - this could be long-term care or regular short stays to give someone (or their carer) a break
- Emergency help - for example when help is needed in a crisis

- Direct Payments - in some cases the council offers the money to individuals in order to arrange their own care

The ICT system weaknesses demonstrated by the service were noted by the report of the Joint Review for the Council in 2000, four years before the fieldwork took place. These weaknesses contributed to limiting the efficiency of the organisation: "The Authority is severely handicapped by its inadequate information technology. Critically, the weakness in IT links directly to the inadequacies within the information system and weaknesses in the administrative support systems" (The Joint Review for the Council9). As with the organisation described in Case Study A, Case study B previously utilised the CRISSP database, which demonstrated significant limitations when established. According to the Joint Review for the Council, social services recognised this client activity database as "outdated, cumbersome and unnecessarily complicated". Senior management at that time, determined the options for the replacement of CRISSP and the development of an appropriate ICT system and associated information systems, which needed to include a detailed and structured project management, and needed to be moved forward swiftly for continued development of social services.

The main systems used by Social Services had only limited interfaces with each other. Thus, for example, FMS (the financial information system), CRISSP (client index system), the corporate personnel system, the child care payments system, and the office systems did not readily connect. The new system was designed to help social care practitioners tackle the challenges and issues posed by new operational practices and constantly changing legislation, while also providing an extensive and flexible database for all aspects of record keeping.

6.3 Practitioners' and Team Managers' Feelings about the new MIS' Implementation

Table 6.3.1 Thematic Category: Practitioners' and Team Managers' Feelings	
Themes	Doubt
	Anxiety
	Frustration

Practitioners were asked to describe their feelings about MIS and the changes taking place and how those changes were affecting their work. The introduction of a new MIS had a

[9] The work was being carried out by a specialist national team managed jointly by the Audit Commission and the Department of Health's Social Services Inspectorate (for reviews in England).

great impact on the way social workers thought about the job they were doing and how they did it. Although many had negative perceptions some noted the potential benefits:

> *"I think it's got a lot of potential, I think it's going to make life a lot easier. I know that a lot of social workers are not too keen on it because it's going to be more computerised and social workers don't go into social work to do computers" SW2.*

This social worker recognised the potential of the system in terms of facilitating organisational processes and in providing better quality of services for the service users. However, she/he also identified a quasi-ethical conflict for practitioners. The new system would bring an organisational change as social workers would have to start using computers to deliver social care services, which most of the professionals were not ready to adjust to and accept:

> *"I think there is anxiety around that. I don't think any of us really feel happy because we don't really know what is going to take place. We have been quite disappointed in this because there we should have had much more discussion on what was happening" TM3.*

Team managers felt anxiety and disappointment about the new system, which leads to the next theme, that of participation. The lack of real involvement reflected the fact that the initiative did not offer sufficient opportunities to engage with the project. As a result they felt anxiety because they were not in a position to know very much and thus had no control over what was going to occur. They also felt deprived and disappointed because the involvement would have led to acquisition of more knowledge and therefore they would have felt more confident about the change.

6.4 Participation

Table 6.4.1 Thematic Category: Participation	
Themes	Practitioners' participation in MIS development and implementation
	Practitioners' participation in decision-making
	Opportunities for involvement
	Difficulties in participating
	Involvement approach
	Giving and receiving feedback

The Thematic Category of Participation consists of six themes as outlined in Table 6.4.1. All groups of interviewees (practitioners, team managers, senior managers, and IT staff) discussed their perceptions of their own involvement in the decision-making in the MIS development and implementation process. In addition, the non-practitioner groups also discussed the level of involvement of practitioners in the MIS development and implementation processes. They commented on the approach used to involve staff and the opportunities offered by the project team for participation. Lastly, the theme of giving and receiving feedback was discussed as a factor which could have assisted the MIS implementation process.

6.4.1 Practitioners' Participation in MIS development and implementation and practitioners' participation in decision-making

At the time of the interviews, March - April 2004 (system went live on the 1st of April 2004), none of the practitioners had any kind of training on how to work with the system and yet the general expectation was that practitioners in the short term would start to input data into the system. When the system would go live it was only the administrative staff that had been trained and prepared to use it.

With regard to their involvement in the selection or development of the new system, practitioners had very little to say. Only one out of five practitioners who were interviewed had been involved in the procedures of developing the new system.

> *"We had workshops about six months ago on different aspects of the system and I was involved in one two-day workshop where we just listed down what was going to be on the system" SW2*

The other four had only been in a half-day training workshop:

> *"No I haven't and I don't think anyone from my team was invited. We have a couple of computers in our team that the admin use" SW1.*

The practitioners raised two main issues; that of low involvement in the development of the system and low utilisation of computers in general. Another issue was the low degree of ICT utilisation by practitioners in the era of information technology advancement could be explained firstly as a result of low investment in ICT by the Council in general and for social workers more specifically.

Team managers, at the time of interviewing, were awaiting their training and the implementation of the system:

"I've had little real involvement in getting this set up. It's been something that has been coordinated at a much higher level. We're waiting for training. They are starting to train the admin staff next week but I haven't had any training yet on how we're going to use this" TM1.

In general terms, their involvement with the system's development and implementation was minimal. Only two out of six had been involved in deciding what the input would be and what kind of reports they might have as a result:

"I was involved in looking at what we want from the system so what the input would be and what kind of reports we can pull off so I was in the team manager's group and we had admin, social workers OTs and I was the team manager representative"TM2.

Disappointment was expressed about the procedures followed. Characteristically a newly employed in the organisation team manager described their previous experience from another social organisation which had proceeded to the implementation of a new MIS system:

"I've been quite disappointed in this because I come from a different authority and I actually moved into this post on 1st of December, I'm new… They were taking information from everyone and there has been no feedback as to what system they are actually going to set up, which forms and which way of doing things are going to be in the implementation plan. My opinion hasn't been asked at all, but probably the previous team manager might have had some discussion"TM3.

Minimal participation was stated regarding the involvement of practitioners:

"Very little involvement apart from admin staff. It's a shame because there should have been more. In previous teams I've known, it's all been discussed amongst everyone and there was a team commitment but I can't see that's happened here" TM3.

This lack of interest was explained as a reaction to the increased workload, non-existence of procedures to promote team spirit as well as lack of commitment.

The interviewed group of senior managers had participated in the development and implementation of the new information system in different ways depending on their position within the organisation. Most performed a very small role regarding selection and development of the system, either because they held a different position at that time or they did not work for the local authority or, finally, they were relatively new to the organisation:

"I've met a couple of times with the project manager and the rest of the team to look at how introducing the new system will link into things like the contact centre and also the work we are doing around integrating the social care and health teams so we met to look at how we are going to manage that in order to make those two systems compatible"SM1.

With regard to their views of staff participation and practitioners in particular, in the system selection and development, they described it as limited:

"We had workshop sessions with consultants and we went into detail of what we felt worked well, what not and what should be on the screen and what wasn't. We had also large information sessions that were held in hotels and the people could actually meet. From my point of view I think they really tried hard to engage with staff and make it actually real for them…" SM2.

The IT staff group included people from the Council's ICT sector who were very closely related with the selection and implementation of the new system. Their participation varied in terms of their degree of responsibility; however, they all had an active role from the beginning until the end of the project. They stated that they did not have a role in design or choice or development of the system as this was "bought off the shelf":

"I haven't been involved with the design or the choice, or the development of the system because it's a package, which the council is buying from a company. The company already supplies the package to lots of other authorities. Where we have been involved was in choosing which reports we wished to bring out of the system and in the analysis too." IT3.

Their views' of practitioners' involvement with the system's development and implementation, varied in terms of whether they should or should not have been involved. One interviewee explained that practitioners were not asked to provide recommendations as they believed that there was a reluctance to shift to a new culture:

"Practitioners have made no recommendations, practitioners culturally and traditionally have had very little to do with information, have had very little to do with systems and in fact, possibly even resent the fact that there are IT systems there. However, in the background was a wholesale reluctance on the part of practitioners to actually embed themselves within the information culture, within the IT culture" IT1.

In contrast one interviewee admitted that without the participation of end-users and experts in the front line, the risk of failure was getting high, particularly in view of the following quotation which suggests somewhat alarmingly that "guesswork" might have played just as equal a part as consultation:

"We took on volunteers from within the service to start looking at the computer side itself, people who knew the system quite well. We had a representative from the admin side, and also a senior care worker. There was a danger that without a senior care worker, you can only guess about what the customer is going to need. People involved in the work were enlisted and seconded to the posts and also meetings were put in place with the teams" IT2.

As the quotation reveals, not all IT staff shared similar views and thoughts. Four out of six believed that more practitioner involvement would both have helped define the system requirements in more detail and revise work practices to better integrate the new system.

6.4.2 Opportunities for involvement and difficulties in participating

Practitioners were asked whether they had identified any difficulties associated with not taking part in the decision-making process and whether the opportunities for involvement were adequate. Practitioners perceived that they were not given real opportunities to participate:

> *"The workshop was not for everybody it was only for some people to set up what we want out of it but it wasn't actually general for all the people it wasn't for everybody to put some work in, and I don't think it was enough and very well prepared" SW2.*

The lack of time, and practitioners' busy work schedules were identified as two factors, that did not facilitate their involvement in the system's development:

> *"Social workers are so much pressured job-wise any spare time left to be spent on the policy of IT and general policy making is just very limited and we are pressurised to come up with and deal with the cases in our waiting list and when that's the situation the service users are more important so I think it's the lack of time" SW5.*

A major difficulty was identified in terms of the project team getting its messages across to busy practitioners. Failure to communicate that information resulted in practitioners moving very slowly towards understanding what the implementation of a new computerised information system meant for them:

> *"Yes, there is always up-date about moving from one system to another. But to be honest, it's not one of my priorities really. Till I will have done my training I am not even thinking about the new system; I am just being honest really. I can't really say how I found it because it's probably information I read on one side, and then went out at the other side" SW4.*

Team Managers believed there were opportunities for practitioners to participate and provide their opinion about the system and how it was going to affect them in practice. However there was a doubt whether what practitioners said was taken into account:

> *"It was the opportunity for care managers to say, or they could see what was expected of them and their involvement with the system and they could raise any practical difficulties that they thought might come up. I don't know how much scope there was to play with the system to make it more user friendly, but the opportunity was there for care managers to say how they think it's going to affect them in practice. I would hope that anything that was picked up there was factored into the implementation"TM1*

Senior managers in general stated that there were opportunities to get involved, however they admitted that such chances were not given to everyone. That may have resulted in establishing a system that has not taken all staff opinions into consideration:

> *"Perhaps, if there had been an opportunity for everybody to attend all workshops we might have had more influence on the sort of system, which was eventually decided upon." SM2*

An IT staff member admitted that there was lack of practitioner presence during the decision making process of choosing the most appropriate system:

> *"They were not involved in decision-making on which system we are going to have but they were involved in business-modelling. We had a project with screen shots and they were getting a view of how this was done with a consultant from the company; we tried to make them feel that it was their system" IT4.*

The last phrase reveals the importance of early end-users' involvement in order to obtain their support later at the implementation stage.

6.4.3 Involvement strategy and giving and receiving feedback

Practitioners in Case Study B were not able to comment regarding this particular theme as only one of them participated in the preparatory work for the MIS.

A point made by the team managers regarding the involvement strategy used and the feedback given by the project team was the availability of information. Although, there was a lot of information going through e-mails, team managers thought it was impossible to process and comment on the information, due to the demands of their caseload:

> *"I think it would have been useful to have more information given to staff so that they had the opportunity to have more information face-to-face. There has been a lot of information but all via email. It doesn't feel very participatory and I think face-to-face meetings with staff would have helped to update people and make them feel it was real, something happening and it involved them and they had the opportunity to comment" TM1.*

Overall, the involvement approach was characterised by team managers as a one-way process of providing large amounts of information to the prospective users of the system without providing the opportunity for feedback:

> *"I think it would, and it should be two-way and that's the problem. If you're having people in the consultation process, you also have to feedback to them what you're going to do… if you're making suggestions then it has to come back, what has happened to the suggestions, the consultation and what the final implementation will be. I think it's not just the consultation but also the feedback on it - moving everybody with you towards the new system. I don't think anyone has really understood that process"TM3.*

Team managers believed that the involvement strategy should have used feedback as a tool for keeping staff up-to-date with the changes. They preferred the face-to-face communication between the project team and their teams in order for practitioners to be up-to-date with the MIS progress and convinced about the advantages it offered to their daily practice:

"I think more could be done to come out to teams and explain to staff really about the benefits of it and I think the staff are not totally convinced that it's going to make their job easier"TM4.

Senior managers expressed precise views of what could have been better in terms of involving staff more effectively:

"I haven't been around long enough but it appears to me from what I've seen that general references have been made to involve people. I doubt that involving people was so much in the selection of the system but more in the trying out and the implementation of the system. I think the success of that has been a bit patchy. I don't think that many staff have seen it or were looking at bullet points about it or being at meetings about it… and these staff they are going to be the first hands-on users of the system …"SM5.

The above mentioned point illustrates a clear contradiction. The system was supposed to be used by practitioners in order to input data directly into it. In order for this to take place and be successful one could reasonably expect that, firstly, practitioners would have participated in determining the business processes for the system as the end-users of it. Secondly, that practitioners' training would have been prioritised as the first in line to be trained so that they could be ready to use the system as soon as it went live.

Senior managers had no involvement in the selection of the system either. They did not have the option of selecting among different MIS from different providers. Instead the project team made the selection for them:

"I don't think so. Apart from the fact that we were very dissatisfied with the previous system no, we were not given a lot of information about alternatives, I mean the new system was chosen by the IT people…"SM3

It was also recognised that there was a need for consultants to work in partnership with social workers in order to ensure that the MIS included all the necessary elements of practitioners work:

"Yes, I think we have social workers who are very adapted in using systems and know what needs to be put on and what gets out, I think they need to work in partnership with the consultants really and see how else it could work because I think consultants are very good in providing a structure but what is going with that structure social workers need to have a say in that definitely" SM2

Some IT interviewees also questioned whether the approach followed was an actual planned strategy:

"I couldn't say whether it was a strategy or not, from my perception, I doubt it was a strategy. I think it was probably largely due to an initiative of the actual project manager coming on board and realising that they did need to involve the practitioners in the development of the system, so early days, let's ask people, it was something that was done. There was then a gap in the consultation and it was really

only when the project manager came on board, about 12 months ago, that a great deal more communication actually occurred. That's been good, but I don't think it was a strategy set from day one." IT5.

Another respondent from the same group noted the difference between being involved in decision-making about the system versus being involved in the modelling of the system:

"Over the two last years, we had involved practitioners in terms of demonstrations of the product prior to any negotiation; we were also aware of practitioner input through the old system. Because we went through a negotiation route we did not formally as part of the decision-making process involve practitioners in the decision-making because the decision was to go with an approved provider."IT6.

According to respondent IT6 the negotiation route chosen was enough to accommodate practitioners' information needs.

It could be argued that overall the strategy followed was not fit for purpose. Not fit for the purpose of eliciting support from practitioners but essential if the system was to be operationalised. It appears that there was not a clear strategy from the beginning on how practitioners as the end-users were going to be involved, which resulted in practitioners becoming disappointed and detached from the MIS project's implementation. On the positive side it is noted that team managers and senior managers alike seemed to have understood that the whole process would have been much improved if practitioners had been involved early enough and offered their experiences as well as gain their support later at the implementation stage.

6.5 Management Information System

Table 6.5.1 Thematic category: Management Information System	
Theme 1: MIS Advantages	Increased effectiveness
	Accuracy of data
	Increased performance scrutiny
	Saving/freeing up time
	Allows more structured responses
	Informed planning and practice
	Better work load balance
Theme 2: MIS Disadvantages	Increase administration & workload
	Technical problems
	Complex processes
	Social work deskilling
	Time spent away from clients
	Dilution of professional relationships
	No service improvement
	No practical use for social work practice

This thematic category consists of two main subthemes as Table 6.5.1 shows. In turn those two themes were composed from more specific subthemes, which were derived from the interviews. The first theme presents what the interviewees stated as advantages of the MIS for the delivery of social services and the second theme presents the disadvantages as they were identified by the research participants.

6.5.1 MIS Advantages

Following their participation in decision-making, front-line workers were asked about the system's expected advantages. They identified a number of outcomes with the most

important being able to read and share information with other professionals and agencies, saving time during administrative tasks and creating available time for meeting clients:

> *"I think in terms of being able to access information it will improve things. At the moment a lot of time is wasted in trying to find out things that might be already known either to different workers or to different agencies and with all those agencies using the same format we will be able to quickly access that, get rid of time wasting and that will be a help in saving time and actually work with clients" SW3*

On the whole, it was perceived that it could provide improved responsiveness and efficiency in service delivery.

The group of team managers was quite optimistic in relation to what the new system would offer to them as managers and to their teams. Thus, their expectations from the system at the time of interviewing were quite high. They identified several fields in their work where they thought the system could offer a real improvement. TMs commented on the expected outcomes from the MIS such as improvements in performance scrutiny in that they would be able to monitor their staff's work, by pressing some keys on their keyboard, as illustrated in the following quotes:

> *"It would be good for me to see exactly where we are, rather than where people think we are. With the system we'll be able to do that on a regular basis without problem. It's very complex at the moment but I should be able to trace by social worker, I'll be able to run off all the information of what's happening throughout the team, and then obviously analyse the information, be able to check whether we are meeting government targets" TM3.*

Accuracy of data, depending on practitioners' input of information directly into the system instead of administrative staff, was perceived to be another positive result for team managers, which would result in saving time. The speed of recording was also linked with their access to records, which they thought of as an important change to their work:

> *"If people start to input data on the system then hopefully their contact records will be done more quickly rather than having to wait for the care manager to fill in the form, then give to admin to load. If that loading is straight on then it's going to be rapidly up-to-date so I as a manager if I need to look at a case that would give me a more up-to-date picture"TM6*

The team managers also discussed saving time by using the system and the reduction of paperwork. Further, they acknowledged the possibility for better workload balance for practitioners, as well as identifying and addressing problems in the future by using the information provided to reflect on their staff's cases.

Quantity of information was also considered a positive element for their work as team managers. They also expected that the complexity in practitioners' work would be better identified and illustrated:

> *"I believe from the system I will be able to extract quite a lot of information. As a manager I need to operate the team like the rate of referrals, templates, what each member of the team is dealing with and what level of complexity is involved in each case because the expectation is that individual team members will be recording the intervention as and when it happens and from there I will get what level of input they are having" TM5*

In contrast, the major concerns for senior managers were related to the overload of data and how that would be transformed into useful information:

> *"There are issues about data gathering for returns to the DoH but that's actually because the system is here to capture the information for the DoH. What worries me is that the new system will create more data and information, which might be too much. For example we will be getting information, which we currently don't gather in the computer so we have to get people to get used to gathering data…"SM5*

Senior managers outlined a very positive picture of the MIS and especially its positive effect on staff and services. They identified improvements in the effectiveness of service delivery, greater accuracy of records, and informed service planning:

> *"I will be able to have an overview of what sort of cases people are dealing with, what sort of referrals we get into the system what are the needs, which come out of the system. That tells me what I need to be commissioning and planning for the future, it will give that planning information that I need"SM1.*

Increased practitioners efficiency in dealing with their caseload as well as more control of the team was considered to be an advantage by senior managers.

> *"It might have long-term benefits because I think we will be able to see where things get stuck much more easily than we can now. I mean now you have to search through loads of files in order to see how efficient we are. It's quite difficult job to do now whereas when it is on an IT system, it will be more apparent, you know, why is that stuck at that point of the assessment for 3 weeks etc. So we will be able to improve service that's to do with the efficiency in terms of being responsive to clients, we should be able to give them [the organisation] up-to-date information quickly when they ask something"SM3.*

In terms of the system's advantages for the Council and social services in particular, IT staff identified several areas of social services work where things were going to be improved including increased effectiveness of service delivery, skill enhancement, saving time, and better workload balance:

> *"It is an integrated system, which is one of the biggest strengths we were looking for. The information which passes through the system will relate to supporting people, will relate to home care module, will relate to financial aspects relating to home care, to residential nursing care" IT6.*

It was also recognised that better quality and quantity of information would offer to practitioners the opportunity to inform their organisations and make better decisions for their clients:

> *"In terms of its empowerment and the workflow element of how practitioners know they record and respond, it is bound to enable much more informed positions for the practitioner and for the service user with regard to their contact with the department."IT6.*

Opportunity to develop better reports and statistical information was also promoted as one of the system's advantages which could really make a difference to both organisation and professionals:

> *"System users once it's in properly it will make their lives easier. It will give them the time they need to forward plan and get a better system rather than spend time fire fighting, providing a basic service because there are no resources for anything else. This system will buy them the time to come out with the management reports so that they can take the business in the right direction, identify problems…" IT2.*

There was a certain belief that the system would have a positive effect for practitioners and the services overall. There was an important proposition that needed to be taken into consideration mentioned by IT participants; the ownership of data by practitioners:

> *"I think for the system user, the practitioners, becomes their system it's their data, they have the greater interest in understanding what we need to capture and they can see what's happening with the service users, they have direct involvement with the system. I think if you have more people accessing the system and recording information you have greater accuracy, which then assists with information production. I suppose making people in the long run more effective makes the service more effective too" IT4.*

Ownership of data by the system's end-users refers to both the possession of and responsibility for information, because this information relates directly to the client. Ownership of data implies power as well as control. The control of information includes not just the ability to access, create, modify, package, derive benefit from, but also the right to assign those data access privileges to others.

6.5.2 MIS Disadvantages

Attention now turns to the negative aspects of the MIS as the interviewees identified them. One of the disadvantages noted by practitioners was that social work practice moved towards becoming a more administrative profession because an increased number of technological tools were introduced and implemented. This appeared to cause a considerable amount of anxiety to social workers, especially those with a lot of years of experience:

"Colleagues are complaining that it's [inputting data into the system] an admin job and if I wanted to be an admin that's what I would do so they are not very keen with the computer but I've been using a lot of the computer; I type all my care plans and things anyway so I think in a way it's going to link in quite easily but it's going to be more admin" SW2.

In addition, practitioners identified how this was going to occur and how the system would constrain their work with clients by placing social workers' words into small boxes:

"The design of most of the systems and I assume this would be the case for this particular system is that it works on the principle that you are going to go out and do an assessment and then you are going to complete it and then do other things well. Quite often with the people I deal with it takes about 2 years to get to the point of getting a diagnosis, let alone getting an assessment completed. For example with a service user I am working now, we are getting at the third year of trying to find somebody to actually do the assessment before I even start doing any provision, so how is it going to work on the system, which has little boxes to fill?" SW1.

Frustration about social work practice that will entail more administrative work and that their work with the clients had to be adjusted to tick boxes was a common theme for discussion with practitioners. In particular, they worried about client's cases which require a very careful approach and extra time from the professional to invest in order to achieve the required outcome, e.g. psychosocial assessments.

Team managers, considering the early stages of implementation (first 6 months), believed that their work was going to slow down due to possible consequences of using the new MIS such as increased workload because of the lack of social workers' familiarity with the system as well as lack of training at the right time:

"Implementation will take longer than planned. There will be a lot of problems. It's also connected with the fact of being behind on the training programmes, and it should have been done. People should be able to go on training and then use the system straightaway, becoming competent in its use. They haven't thought enough about these implications, how you actually learn. It's fine to go on a training session but you actually have to use it straightaway afterwards. In the long-term, it will be a great improvement, I hope"TM3.

They also commented on the effect of temporary deskilling resulting from a change introduced over a short period of time:

"I think it has been for staff whether at the ground level or managing staff a period of very rough changes, which is very hard work to keep up and to take on and experienced staff have felt at times a bit deskilled because we are not sure what we know for the process of what we should be doing whereas 3 months before we did. So people do get change-tired and again it adds extra pressure if you have under resourced teams" TM6.

IT participants were concerned about the problems of systems not being compatible and the implications for co-operation:

"We will need to have network links with the Mental Health records, which are held on a different system by the Mental Health Trust. There may be a problem of linking with other authorities because not all authorities are using the same system as us. The biggest problem will be linking with the primary care trusts in the national health system because there is a system coming in called The Single Assessment Process (SAP,) which will require exchange of records between social services and NHS and although it can be done on paper, there will need to be a link between the two networks" IT3.

6.6 Social Work Practice

Table 6.6.1 Thematic category: Social Work Practice	
Themes	Practitioner's data input effect on social work practice
	Paper versus computer culture
	Managing changes in social work practice

As the Table 6.6.1 shows the thematic category of Social Work Practice consisted of 3 sub-themes. The aim of this category was to identify how social work practice could be influenced because of the MIS implementation, if there were any major changes, and how practitioners, team managers and senior managers thought those changes could be managed.

6.6.1 Practitioner's data input effect on social work practice and paper versus computer culture

With regard to the changes in social work practice from using the new MIS and inputting data into the system, practitioners recognised that in this way their work would probably get done more easily compared to giving the care plans to administrative staff for typing, as was done in the past. However, the fear of becoming more computerised and spending more time in the office rather than with the clients remained strong among social workers:

"I think it's got a lot of potential, I think it's going to make life a lot easier. I know that a lot of social workers are not too keen on it because it's going to be more computerised and social workers don't go to social work to do computers" SW2.

Furthermore, practitioners' perspectives on the organisation itself and the application of the new system were very much influenced by the way the organisation devised the new MIS

and what that meant for a social worker's job. Although practitioners talked about being able to see the importance of advancing the current system, they could not link it with their work, which encompasses direct involvement with people:

> *"I think computers are necessary there is no way around it but no one is going to social work to be working on a computer we go into it to work with people. With the new system in the future at some point is to not have files but having everything in the computer I am not sure what I think about it really I just find it easier if I can see and find things quickly" SW2*

Moreover, practitioners' concerns expanded on the way systems are devised and implemented, as well as how that affects how they practice social work:

> *"I think the first thing is, as happens at the moment and as the council and the NHS always have done is that the top defines what the systems are. So they devise a system for each individual function from the top-down so when you get at the bottom you have 20 different systems all devised by the top and you are going through this repetitive process of completing all these forms often saying exactly the same thing for the top. The computer systems as I can understand them do exactly the same thing; instead of looking at what I actually do and then collect information from what I do; there is no analysis of what I actually do. Management is defining how I should do the job and in a bureaucratic way rather than looking at what I do and then have this fit with the information they require" SW1.*

According to the above quotation management defined its information needs, without taking into consideration practitioners' needs. Similarly the management of the organisation defined how practitioners are expected to carry out their work and accordingly designed the MIS.

Team managers raised various concerns regarding the use of the system. They also perceived that the system is going to advance the entire organisation, albeit in slow motion:

> *"Until September staff did not have PCs on their desks, so the whole IT thing is very new, people have adjusted quite well to having computers on their desks, and using e-mail, doing their own word processing. This takes it a whole step further so I think people are uncertain at the moment, but they can see it has potential" TM1.*

They also expected that their workload would increase until their staff were able to deal with all the difficulties expected in the first weeks of the system's implementation:

> *"The long term I think will be much better but we are going to have a lot of difficulties because it's such a different way of working for some people we just are not going to get through the work we normally do and we've got a waiting list and we'll get much more complaints and I will have a lot more to deal with potentially and just I think people are going to need more support and encouragement. Initially it's going to be quite hard"TM2.*

Senior managers raised considerable concerns regarding the changes for social work with implementation of a new MIS. Although, the senior managers recognised its ability to

transform their work and lead the staff into a more advanced level of providing services, they had reservations on what kind of organisation it would be in relation to social work practice:

> *"I suppose the danger is that we will become a faceless organisation and I think it's important that we keep that face-to-face contact (with service users). I can see that the system will be a way ahead and I have watched other authorities where the same kind of system has been introduced that it does make an incredible difference to have that data at your fingertips. However, it does take a quite big cultural shift in the way people currently work in practice. I can imagine why it is so threatening to people"SM1.*

They indicated that working with the new system will reduce the time spent for face-to-face contact with the client. So the organisations which provide social services are in danger of becoming "faceless" because the time spent with clients is lessened by imposing new bureaucratic procedures and increased recording on practitioners. This is also a contradiction for social workers and the agenda promoted by the government:

> *"I think there is a big contradiction between the way the business of social care is going and the professional ideology of social work. I think what we see really is a change in the social care organisation process, which isn't necessarily reflected in the ideology of the profession. Every time I am going to teams meetings people moan about IT systems, information that does not get in and stuff like that; and the burden of producing information sometimes in paper to meet performance indicators, which we must return to the DoH. So I think there is a tension…but still there are a lot of people out there who wish to go back to the old days of social work"SM6.*

Senior managers were also very much aware of the change accompanying the new system and how they are going to manage that change in a cost-effective way for their staff and the delivery of service:

> *"The main change we all hope is going to happen is that the practitioners are going to input for themselves and they will be responsible for their own files up-dating, which seems very important rather than having admin doing it on their behalf"SM6.*

On the transition from a paper-based culture to a computer culture, a senior manager interviewee was able to identify difficulties and factors which needed to be taken into consideration. The difficulties are located in the different age spectrum of practitioners, differences in experience (very experienced staff versus less experienced staff), which means different training needs and different technology use, which in turn indicates that staff have a variety of needs in terms of training. As a consequence proper training on IT and technical support was required in order to cover different staff needs and continuous support in order to ensure that all staff were adjusted to the new system:

> *"We have several factors to take into consideration; one of them is the amount of training and support for individuals, which I know there is some but I don't know how good it's going to be because I don't know what people's needs are both in training*

and long-term support because the workforce is from a variety of ages and experiences and a variety of technology usage so we don't know, some people will be able to function very quickly using the technology and others will find it very difficult and need more support. It all depends on the on-going training and support"SM4.

On managing the information produced by the system, senior managers believed that the practitioners' data input into the system should return to them in a format, which could be useful for their practice:

"Well, all those results should get back to people on the ground doing the job and at the moment what we get is loads of things, which are going up to the DoH for star rating etc. but very little of that seems to come back in a meaningful way to social work practitioners... We ought to be able to bring that information back to them in a better form than what at the moment is produced"SM4.

Practitioners in order to own the data, as was explained earlier, need to receive information in a format that they will be able to utilise in their everyday work. That is a precondition for information sharing:

"What's interesting is the information sharing systems, which rely on not only the information provider (something which happens with e-mails) so it's not only about providing information but also about sharing that information with others"SM5.

Senior managers also emphasised the importance of providing adequate and accurate information for securing funding for programmes and services:

"I mean that's important because at the moment what tends to happen in the way the information is collected is used as almost only where you have performed well. So we will give that sort of money and that's difficult to describe and almost disincentive but I am not sure whether practitioners on the ground are aware that's the way funding is released" SM1.

According to IT staff, the implementation of the new MIS changed the culture of data entry, from administrative input to practitioner input with implications for training:

"I think from the social workers point of view it's a completely new way of working to what they have currently worked. The perception for many years has been that the database has been an admin tool. We are now changing that. Social workers will be directly involved with the inputting which has implications in terms of training. We need to give them the skills in order to achieve that goal"IT4.

Practitioners' input also required that they would relearn how to input data as the system required them to use a common approach. This would also offer the opportunity to re-examine the business processes, which in turn would change the way practitioners work:

"The impact will be huge on the people who operate the system. They will have to relearn how to input information so it's a chance to get all the teams working in the same way so that's a big plus. But there will also be a chance to examine the business practices and the intention is that we reduce the amount of paper so that people, who

haven't input data directly before, notably social workers, will be required to input data directly into the system. That's a change of practice."IT3.

IT personnel perceived that the impact of the new MIS on the organisation would be measured later as the system's usage evolved:

"The impact could be very big on the organisation and the benefits for service users could be very big. We have to wait and see how it works. The service outcomes should improve. There may be a change in service outcomes not just because of the introduction of the new system but because the whole basis on which people are eligible for services has been reviewed and there are new, tougher eligibility criteria, which affect, for example, whether people are eligible for homecare"IT3

The issue that good quality of information is going to improve the service outcomes as well as increasing the available funding for new services was also stressed. Again this was explained as a result of the pressure for more efficient services.

"It's only through usage of the system that we will actually reveal other benefits, opportunities, which may well determine that we go in a slightly different direction to return greater benefit. I think the important part of the development, although we're constrained by statutory obligations, reporting obligations, electronic social care records and all the other initiatives that are going on in the background and influence the way in which IT develops, by usage of the system itself we may find some local benefits that we can gain from. I look confidently forward that we will be able to do that"IT1.

Moreover, they pointed to the need for changes to take place on social work practice which depends a lot on the utilisation of the system by the practitioners themselves:

"The problem will be trying to identify which changes are the result of the system and which are the result of other changes in practice. The motive is that the changes will be for the good. I can imagine a social worker saying the changes are not good but it depends on their age, social workers who have been around a long time, who are used to working on paper would say that, and we have some social workers who have an IT system and are all connected but it sits on the desk and they lean their folders against it"IT3.

Concerns were also raised about sharing and managing the information and its flow in order for both end-users and the organisation to get better quality of information:

"Once again, it's down to the commitment of other people to actually want to feed that information (not hang onto paper) actually to put things into the system and then by access be able to see that information. It's down to the willingness of the worker to actually look through the case notes, the electronic case notes that are actually in the system" IT1.

IT interviewees were also aware of the information sharing issue as well as its relationship with ownership of data. These two factors shape a relationship. On the one hand data ownership offers better quality of information and as a result accuracy of records and increased accountability. On the other hand information sharing was regarded a very important

factor because it was meant to support and improve delivery of services in collaboration with other organisations such as the NHS or Mental Health:

> *"I have this concern myself, and I am under pressure from many quarters to be able to define how those information flows will work. There are so many obstacles in the way, practical issues like people don't have time to think about such things and how to make it happen, through to issues like the Data Protection Act, to issues like wanting to exchange and have data flows between us and the primary care trust or the health organisations but we have technical blocks, or different agendas, different funding streams, they have other priorities to us... It's the nirvana we are all chasing, to be able to have information and knowledge at our fingertips and share it with everyone involved" IT5.*

6.6.2 Managing changes in social work practice

Team managers were concerned with how change would occur and how it would be managed, particularly with the transfer from administrative staff input to practitioner input:

> *"So, there is a big challenge for the service to make the system user-friendly really and one of the big issues is, will the data inputting remain a sort of clerical function as it is at the moment or it will become a practitioner based system, where you as a social worker will input your own data and that's where they want to go? It is a big cultural change and it will take a lot of time and at the end of the day the quality of data will be problematic."TM4*

The same interviewee highlighted that this cultural change would affect organisations and their management. The addition of more bureaucratic procedures and increased managerial demands they could lead to low staff recruitment and retention:

> *"I think you can't do it by taking a big stick and saying "you've got to do it" you have to take staff forward, persuade them, teaching and supporting them with that problem otherwise we will loose staff and we are in a situation where it is difficult to recruit, …if they feel that it is been unnecessary extra bureaucratic demands placed upon them then they will leave…"TM4.*

On how to manage that change, team managers suggested a range of ideas based mainly on attending by practitioners all the available training sessions and gradually building up the confidence of each individual as well as making the current IT equipment available for everyone:

> *"It's going to be a learning curve for most of the staff and also we need to be able to roll out the equipment and the networking and that is going to be a problem because lots of our services are fragmented. We operate in small remote offices that they don't have the network connections, so major structural problems…"TM4*

On managing change, the views of senior managers varied. One suggested solution was the provision of training and support:

"I think that if we can offer people new technology and good training as well but also having somebody around offering guidance and support at least for the first 2 weeks maybe even a month because there is always this fear when you introduce a new system that people will be left alone to get on with it and I think people do need support"SM1.

However, another person mentioned that the most important factor was to accept the new way of thinking and working:

"…I think staff do not necessarily see the benefits that come back to them. They only see the benefits of information from the system that goes back to the people in higher positions in the organisation. All the ground people don't see the immediate benefits; all they see is the extra work and labour having to input into the new system and having the team manager to manage their caseloads..."SM5.

On managing that change and the resistance that follows:

"Whilst we've been going through the process of implementing the system and making it accessible to admin staff we have been kitting out practitioners as well. They soon became very conversant with the benefits of using IT and IT products. Therefore, moving to the new system is like a next stage, so they're not being dropped in at the deep end, going from no IT access to full IT access, we've taken them through this incremental change. All part of the change management"IT1.

In conclusion this thematic category about social work practice and the consequent changes emphasised the need for information sharing in order to achieve better quality of service outcomes. It was also mentioned by the interviewees that social work practice is going to become more business-driven than it already is, which was a major concern for social workers as they felt that was going to result in a contradiction with their professional ideology and make social care organisations faceless to the clients they serve.

6.7 Organisation and Organisational Knowledge

Table 6.7.1 Thematic Category: Organisation and Organisational Knowledge	
Themes	Knowledge generation and management
	Organisational learning and skills sharing
	Information sharing

The final thematic category of Organisation and Organisational Knowledge included the themes of knowledge generation and management, organisational learning and skills sharing and information sharing as is shown in Table 6.7.1.

6.7.1 Knowledge generation and management

Practitioners had difficulty in understanding how the system could contribute to organisational learning and knowledge creation. They had been pre-occupied and concerned with the changes in their line of work:

> *"All I can say is that the increase amount of IT and the work we have to do is worrying me from the point of view that time spend on the computer is time that I don't spend with my clients and just as I said the system is wonderful because it will save time in terms of communication and you go faster but I have been using a computer extensively before I came here and never as fast on a computer as I was with writing, so it will slow me down, it will take time away" SW3.*

On knowledge creation and management, team managers' interviewees acknowledged the possibilities that MIS offered to improve social work knowledge creation as well as better information about service users:

> *"I think yes, I guess the more information you have the more data and the more that's linked to analysis and measurement of outcomes. It will help to inform knowledge and enable us to manage interventions and to provide evidence as to what method what outcome is more successful than others and I think it will help us to challenge poor practice and enable us to identify good practice and provide the data to back that up"TM4.*

With regard to knowledge creation and management, senior managers could see benefits for creating knowledge with the utilisation of MIS but at the same time could foresee problems of staff having the space and time to take advantage of it:

> *"If you have a huge MIS with lots of information and you don't have time to read it, then it's no good to you, is it? So it's actually about balancing the resources of the organisation in terms of its human resources because the vast body of the information is useless if you can't do anything with it…" SM5.*

They were also able to recognise that the MIS was going to produce huge amounts of information, which could be overwhelming unless there was an established knowledge base on which to build and adjust that information:

> *"You need more detailed information, I think the balance is to decide what that information is going to be for us, what the knowledge base should be and then be able to run a sufficient number of queries in order to produce it without overwhelming us with sort of huge amount of information. So it's striking a balance on the specific local information that we want"SM6.*

Senior managers expressed the opinion that knowledge creation and especially local knowledge, which was most needed, would be an outcome from the new system's utilisation:

> *"And the other thing is that the practitioners will not know the full thread of the work because the practice bit they are involved with, I mean, it will be nice if they would understand the returns that we have to make to the DoH and all the information that*

we can get back for statistics and service development because all that is not integrated to people's heads…"SM4.

According to senior managers, that relationship is not yet straightforward enough for practitioners. The practitioners by using the system would gain a new kind of power, the power of information, but they have not realised yet how important that is.

Lastly, on the issue of knowledge creation, the IT staff interviewees could see the potential of the system to offer alternative methods for the capture and transfer of knowledge within the organisation and between practitioners, managers, and service users:

"At the moment, it's all in people's minds. If anyone goes off sick, the structure of teams are always changing, when people are on site they can maybe help each other out and step in but a lack of knowledge might be because of manual paperwork, whereas there would be more information on the system readily available to others…" IT2.

The IT staff also supported the idea of knowledge creation for social workers as the system would offer that opportunity. However, they stressed the need that for this to be achieved there was the need to create a partnership with the practitioners who as the end-users of the system provide it with the information it needs in order to provide them back with reports which they need in order to work.

6.7.2 Organisational learning and skills sharing

For practitioners the issue of learning within the organisation was achieved mainly by informal interaction between themselves. Splitting up services had the negative effect of abolished existing informal networks and the opportunities this might have afforded for learning together. They were not sure whether the implementation of the MIS could replace that kind of learning:

"In the way we worked in the past most of us, most of the information that we knew was by the informal network and that could relate to service users could relate to policies etc. We were sharing information because we were at the same office. Now we have split up, we have no idea what to do so you end up discovering what's going on what you didn't know. And that information stays with you and you don't see anybody else's either; so the network which used to exist when the council didn't provide very much information, which is still the case, but now there is no informal network either"SW1.

Nevertheless they could foresee that the MIS might provide them with better opportunities for learning and sharing skills with other professionals than they had in the past mainly through the medium of multi-disciplinary meetings:

"At the present moment the only times that we share between various agencies is about having a multi-disciplinary meeting and make the time to drag all these people together under one roof is not easy. I can see an enormous difference because we are going to be able to access different reports, having information getting across" SW5.

The IT interviewees claimed that practitioners need to become less defensive about their practice and more receptive of new forms of learning. They stressed the importance of practitioners to adopt a more positive attitude about the effectiveness of MIS:

"We could have the best possible reports, the most informed reports available, and a great volume of informed reports accessible to all practitioners but unless there is ability to receive it at the other end, it is valueless. So it's once again a partnership. There has to be a commitment on the part of the practitioners to receive and to improve their practice not to be defensive about them. Often, in social care they are seen as a specific group and they often go around with a chip on their shoulder, they are defensive about how they do things. If you come along and encourage them to improve their practice, they'll see that as criticism. So unless there is a cultural shift on the part of practitioners to put themselves in a learning position, that they are absorbent to learning, then it doesn't really matter how good the reports are out to practitioners"IT1.

According to the above quotation learning depends on the practitioners themselves. IT1 considered practitioners as very defensive professionals when it comes to their practice and it is up to them whether they wanted to use the system as a learning tool as well.

6.7.3 Information sharing

The previous section was about sharing knowledge and skill within organisations whereas this section discusses opportunities for sharing information between organisations. Practitioners' ideas about the system varied with only one common element; they were not sure whether the system will be able to have an impact on that issue:

"By making information available among teams and even professional teams I would hope that if me and a district nurse have the same information I could say to her "look at my care plan and comment on it". I would hope so, but it is necessary to make sure that everybody has the training all across the field because if not everybody has access to it, it is not going to work, is it?" SW4.

Team managers also identified the possibilities of inter-professional working across multi-disciplinary service provision. The new system could have an important role in that:

…It would stop this awful business that we currently have of faxing situations through to nurses and getting decisions on where they are. We'll be able to put it up on the screen. When we get to that stage I can see the world changing but there is a long way to go"TM3.

Senior managers mentioned that an advantage of the system was that it may provide to all related professionals the information they need in order to get to that level of communication and sharing information through the system:

> *"I would like to see them using the same system all the way through which make things much easier because we all will be able to access each other's work"SM3.*

For IT interviewees recording and sharing information through the MIS could mean that a number of mistakes could be prevented:

> *"I hope they will understand that there is a need to record things and actually in some respects it protects them in their working role. There have been some high profile cases which had an impact on the way social services need to work. So we can't be dictated about how we need to work and I think workers now clearly understand that they need to record information. The system they are going to use will allow them having a consistent approach in information recording and the information they do record is accessible to others so it would help prevent some messy situations that often occur"IT5*

Concluding this thematic category about organisation and organisational knowledge creation it is important to note that the users feed the system with data in order for managers to be able to extract information and for the organisation to create knowledge. Practitioners could partially adjust to the idea but they also recognised the dangers behind it. It could be argued that it is a consequence of practitioners' resistance to using the new system because of the increased workload and of their opinion that from now on more time will be spent with the system rather than with the clients. For IT interviewees this could only be achieved by the successful transformation of the organization from a paper-based culture of social work practice into an electronic-based culture. Finally, it could be argued that all the perceptions expressed regarding MIS use, data ownership, information sharing and knowledge creation are interconnected and form a new field of dialogue for social care organisations.

The research participants' ideas and perceptions are encapsulated in a case-ordered meta-matrix as shown in Table 6.8 following below.

Case-Study B	Case-Ordered Meta-Matrix Research Themes with Interviewees Groups			
Thematic Categories	**Social workers**	**Team Managers**	**Senior Managers**	**IT Staff**
Practitioners' and Team Managers' Feelings about the new MIS' Implementation	1. The MIS had potential 2. Quasi-ethical conflict for practitioners	1. Anxiety and disappointment 2. Fear of the unknown and not having control	——	----------
Participation	1. Involvement in system's development/implementation was minimum (1 out of 5 SW) 2. Job pressure was one reason for not taking part 3. Project team selected the participants 4. Failure to communicate project team's messages to practitioners 5. General involvement in decision-making is minimum	1. Degree of involvement varied among TM s. 2. They were involved in deciding what info they need from the system (2 out of 6) 3. E-mail was the main source of information = not very successful 4. Practitioners should have been more involved 5. Involvement approach=one-way process without feed-back	1. The system was chosen by IT people 2. SMs were involved in meetings on how it was going to be utilised 3. On practitioner's participation: staff was involved in implementation but not in the development 4. Project team made an effort to engage staff with the system but the involvement approach was not effective	1. Traditionally practitioners have very little to do with systems 2. Practitioners were not formally involved in the decision-making process but in business-modelling
MIS	1. Help on making information accessible 2. Social work practice moves towards becoming an admin profession 3. System has a 'tick box' structure which constrains social work practice 4. Communication between different professional teams can be improved	1. Launch of the system will have an obstructive impact = work will be slow 2. Improvement in performance scrutiny 3. Monitoring their staff's work 4. Increase staff's efficiency in dealing with caseload 5. Accuracy of data	1. Increase efficiency of service delivery 2. Accuracy of records 3. Inform service planning 4. Concerns on overflowing data & how it is going to be transformed into useful information	1. Increase efficiency of service delivery 2. Skill enhancement 3. Saving time 4. Better workload balance 5. Big challenge=link the system with the one the Mental Health Trust uses 6. Barriers for internal & external communication: data protection act, different agendas, other priorities

Case-Study B	Case-Ordered Meta-Matrix Research Themes with Interviewees Groups			
Thematic Categories	**Social workers**	**Team Managers**	**Senior Managers**	**IT Staff**
Social Work Practice	1. Practice becomes computer-driven rather than client-driven 2. Work with clients will become easier if everything in on a PC	1. Social worker's deskilling 2. Monitoring staff 3. Worry about their work becoming more demanding 4. Managing changes in practice would very demanding	1. Danger of becoming a faceless organisation 2. Contradiction between the business of social care & the professional ideology of s.w. 3. Changes in the social care organisation processes	1. Practitioners must understand what data the organisation needs & own it 2. Good quality of information would improve service outcomes
Organisation and Organisational Knowledge	1. Sharing skills and knowledge is an informal process 2. Collection of information does not mean analysis & dissemination 3. Management defines practitioner's job in a bureaucratic way 4. Sharing information can be really exciting in multi-disciplinary way 5. There is not an established formal network of sharing	1. Managing the cultural changes is a big challenge 2. Organisation is going to get benefits but in the long term 3. MIS can improve social work knowledge & information about service users	2. Seeking a cost-effective way to manage the cultural changes 3. Managing change: training support, lack of resources in LA 4. Guidance and support due to a big variety of workforce (age, discipline) 5. Make staff realise the benefits from collecting information 6. Information must return to practitioners in a certain format 7. Accurate info secures funding 8. Benefits for cooperation & communication with external environment	1. New way of working for practitioners=data input 2. Resistance to change & IT is a concern 3. People who have worked for a long time are more resistant. 4. Knowledge generation will be bottom-up 5. Reports can be produced but there has to be a commitment from the practitioners that they will receive them & improve their practice 6. Learning opportunities from the use of MIS

Table 6.8: Case-Ordered Meta-Matrix – Case-Study B

6.8 Conclusions to Case Study B

In Case Study B the analysis and discussion of the research findings explored the perceptions of the research participants as these were illustrated according to the five thematic categories. This primary analysis and discussion of the research findings aimed to recognise commonalities and differences across the interviewee groups in order to be able to draw conclusions and lead the researcher to the next level of analysis which takes place in the next chapter.

In the first thematic category of Practitioners and Team Managers Feelings about the MIS implementation it was identified that both the groups of the interviewees were anxious about the new system which was going to be implemented. They explained that this was mainly due to the lack of information available to them about the new system's implementation.

Regarding the second thematic category of Participation it became clear across the groups of interviewees that none of the three groups (Practitioners, TMs, SMs) was involved in the decision-making process about what system ought to be selected and from which provider. When the system had been chosen, they had project demonstrations and meetings in order to identify information needs and establish the business modelling for the system to run. IT interviewees claimed that practitioners had nothing to do with selecting the system. It was also found that practitioners in the whole organisation had minimum involvement and from the six interviewed in this research only one had been invited to the above mentioned meetings. Another aspect of low participation in the IT information, briefing and consultation sessions was that of increased workload not affording time or opportunity for these activities, which was raised by all research participants. Furthermore the communication approach followed by the project team for giving and receiving feedback through e-mails had been characterised by the recipients as a failure.

Regarding the MIS the research participants were able to identify a variety of advantages and disadvantages. They expected improvements in terms of accuracy of data and monitoring of staff as well as increased efficiency in the delivery of services. Practitioners raised concerns about the "tick box" culture of the system because this they believed could cause difficulties in their practice with specific groups of clients.

The rest of the interviewee groups expected better outcomes in terms of increased efficiency in service delivery for the organisation.

In the thematic category of social work practice all interviewees agreed and foresaw changes in social work practice because the MIS needed to plan new business processes. For team managers, especially, this was presented as a major concern because they would have to manage changes in the front-line of service delivery and in a sense re-train their teams to work within these new processes. Practitioners were cautious about the transition to computer-driven social work practice but they did recognize that technology could assist them with their work with the clients.

Finally, for the thematic category of organisation and organisational knowledge apart from practitioners the rest of the interviewee groups recognized that there would be opportunities for organisational learning and skills sharing as well as for organisational knowledge creation by utilizing the MIS. On the contrary practitioners believed that organisational learning and skills sharing occurred in the past through team and multi-disciplinary meetings and informal networks. Practitioners recognized that opportunities for learning were less because of geographical services' fragmentation. Yet, they could not see how the new MIS might assist them towards this goal as they claimed that there was not a formal network of sharing in inter and intra-oranisational settings.

The next Chapter presents a comparative analysis where the research findings are analysed across the two Case-studies in order to explore common and different response patterns between the same groups of interviewees.

CHAPTER 7: Comparative Case Analysis of the Research Findings

7.1 Introduction

This Chapter incorporates the discussion begun in Chapters 5 and 6 into the next level of analysis, where comparisons were made between the groups of interviewees in the context of the five thematic categories that were developed. The purpose is to identify and explore similarities and differences between the groups of research participants. It was expected that this comparison would assist the interconnection of the five thematic categories, with the literature comparison, which takes place in Chapter 8. As described in Chapter 4 the technique used was to select pairs of the groups (e.g. practitioners Case-study A with practitioners from Case-study B and so on) and then to document similarities and differences between each pair (Miles and Huberman, 1994). In order to display this information, role-ordered matrices were employed, in which data is represented according to sets of individuals occupying different roles within their organisation. Following this, themes were selected to enable relationships among them to be identified using the method described by Miles and Huberman (1994). This method uses concepts, which are likely to have an important impact on the outcomes of the analysis. For each outcome there will be various concepts leading to it or creating it. This helped illustrate new relationships among the different groups and finally to reach closure of the thesis.

7.2 Practitioners' and Team Managers' Feelings about the new MIS' Implementation

7.2.1 Practitioners

Role-ordered matrix	**Table 7.2.1 Practitioners' Feelings about the new MIS' Implementation - Practitioners**
Practitioners – Case-Study A	1. Time to familiarise with the system creates anxiety – SW3 2. Doubt about the system's usefulness for them – SW5 3. Frustration about the emphasis on the system – SW3
Practitioners – Case-Study B	1. Why social workers join the profession? –SW2 2. Ethical dilemmas
Similarities:	
Differences:	• Case A: Personal feelings about the system • Case B: Ethical/professional Dilemmas

Table 7.2.1 shows the findings regarding the first thematic category of practitioners and team managers' feelings about MIS implementation. The group of practitioners in Case Study A raised personal feelings about the system's implementation such as anxiety and frustration. Practitioners from Case Study B were more concerned with the ethical dilemmas surrounding the implementation of MIS in their organisation and its effect on social work practice and, more specifically, their work with clients. Thus, there were no similarities identified as the table above shows. The difference identified between the two groups could be partly explained through the extent of their involvement in the preparatory stages before the system's actual implementation. As illustrated in Chapter 5, practitioners in Case Study A were more involved than practitioners in Case B (Chapter 6) which meant that they had spent more time finding out and familiarising themselves with MIS than had practitioners in Case B. The latter group did not have their training at the time of being interviewed which was just before the system went live, so they were speculating in a general way about it. By comparison, the practitioners in Case A had spent quite some time with the system in training seminars and workshops so that they had developed feelings because their work was affected in terms of finding extra time to undertake the training.

7.2.2 Team Managers

Role-ordered matrix	**Table 7.2.2 Team Managers' Feelings about the new MIS' Implementation – Team Managers**
Team Managers – Case-Study A	1. Doubt about criteria on the system's selection – TM1 2. Oppressive procedures-TM5
Team Managers – Case-Study B	1. Anxiety because of the unknown –TM3 2. Disappointment about procedures followed –TM3
Similarities:	• Procedures of selecting/involving staff created disappointment
Differences:	• Case A: Doubt about selecting the system • Case B: Anxiety about the unknown

Regarding team managers' feelings these referred mainly to the procedures followed by the project teams to communicate information about the new MIS to the rest of the organisation, the selection procedure of the MIS and the procedure of involving staff with MIS familiarization in each organisation. One similarity was recognised between the two groups of interviewees regarding the procedures followed

to involve staff. Team managers in Case A characterised the procedures as oppressive while team managers in Case B only felt disappointment because they would have liked to see their staff being more involved than they had been.

In terms of differences, team managers in Case A expressed doubt regarding the criteria set by the organisation in MIS selection whereas in Case B team managers felt anxiety because they were not sure what could occur for them and their teams. Both those elements could be explained by the insufficient information and feedback team managers had received from the project team. Thus, it could be argued that team managers needed to be more involved and informed regarding criteria and decisions about the new MIS in order to understand the rationale for it, and be sure that the organisation had taken their needs into consideration. They also needed to be aware of what to expect in terms of changes and also what they were expected to do in order to help their teams become better adjusted with the new system.

7.3 Participation

7.3.1 Practitioners

Role-ordered matrix	**Table 7.3.1 Participation - Practitioners**
Practitioners – Case-Study A	1. Limited participation in decision-making due to workload and managerial constraints – SW1,SW2 2. They are asked about general issues – SW1 3. They feel that they are not listened to because they do not get any feedback – SW5 4. Line management is accessible - SW5
Practitioners – Case-Study B	3. Involvement in system's development/implementation was minimum (1 out of 5 SW) – SW1, SW2 4. Job pressure was one reason for not taking part – SW4 5. Project team selected the participants – SW1, SW2, SW3 6. Failure to communicate project team's messages to practitioners – SW1, SW5 7. General involvement in decision-making was minimum – SW1, SW2, SW3, SW4, SW5
Similarities:	• Minimum participation in decision-making • Communication failures/No feedback • Workload hinders participation • Unknown extent of practitioners contribution
Differences:	• Line management more accessible in case A • Project team selected who is going to take part in case B

The table above encapsulates the findings from both cases for the group of practitioners on the thematic category of participation. The first similarity identified between the two groups of participants is minimum participation in decision-making and in MIS design and implementation in particular. The previous Chapter vividly illustrated their wish to get involved. The low degree of participation was also described. Another similarity that emerged was the failure in communication within both organisations. Practitioners complained that historically there was a lack of feedback given to them whenever they had been consulted in the past. It was also commonly recognised that the high workload hindered participation. The amount of caseload and the way in which social workers dealt with it up until the time of interviewing was a major obstacle. This does not necessarily mean that the social workers interviewed had difficult or excessive numbers of cases, but rather they had to choose between spending their time with their cases or with organisational issues. Finally, in both Cases the degree of participation was unclear as there were no official figures detailing the extent to which practitioners took part in the MIS design and selection process.

In both Case Studies it was apparent that social workers were excluded from decision-making processes because of the organisational structure. The hierarchical structure of social care organisations does offer opportunities for participation; however, these are limited and directed from the top not the bottom. For this reason social workers felt that they participated when the choice was given, not when they thought it was essential for them to be involved.

An additional similarity was the lack of communication within both organisations. In both case studies the organisations used fortnightly team meetings, e-mails and newsletters as means of communication. A large amount of information was delivered to the practitioners through team meetings. These meetings performed a dual role. The allocation and monitoring of cases, discussion of training opportunities and the discussion of general organisational issues were the main topics on the agenda. In this context it was down to each team manager’s discretion whether to pay more attention, for instance to a team, or to an organisational matter. E-mails as well as electronic or paper newsletters were regularly used to pass information from the top to the bottom of the organisation. In the case of MIS implementation both project teams used e-mail as a tool to inform the rest of the organisation of the project’s

progress. In view of the admitted degree of computer “illiteracy” among front-line workers, this seems an unreliable method of disseminating important information since the “illiterate” would have to rely upon the “literate” to get the message across.

Additionally, the lack of feedback to practitioners when they were asked to contribute in a specific project or to critically discuss a new governmental or council policy was commonly recognised as an organisational weakness in both case studies. Social workers in both organisations were asked for their opinions or whether they were consulted as to what would be the best solution to a situation; however, they rarely received any feedback on the results of the consultations or on how their contribution helped. It was apparent that the lack of feedback was a factor, which created a negative environment for ongoing participation. The absence of a systematic process of feedback led people to think that their contribution was not appreciated and valued and made them reluctant to take part in future projects. A vivid example of the failure to properly inform practitioners was the fact that, in both case studies, social workers were unaware of the degree of their participation and how much they had actually contributed to the new system’s implementation.

Social workers stated that workload reduced the opportunities they had to take part in organisational procedures and in MIS implementation in particular. Lack of resources created staff redundancies and as a result, social workers were assigned more cases than they should have been, plus administrative work. Reaching targets and achieving performance indicators were also factors, which caused anxiety to practitioners, as they felt that these were a burden. Keeping up-to-date records was also highlighted as a procedure which takes up a great deal of their time. For many social workers the use of PCs was another difficulty, as they lacked skills and training. As a result they spent more time than they should have on record keeping.

Differences identified between the two teams were the accessibility of line management in Case A, and in Case B there were concerns that it was the project team i.e. the IT staff, that selected who was going to participate in the new system’s implementation. In Case Study A practitioners acknowledged that the line management in their organisation was very accessible and that social workers had opportunities to approach people at the top levels of the organisation. However, that accessibility did not ensure that feedback was given to practitioners. In Case Study B the interviewees paid more attention to the fact that the IT team selected the people

who were going to take part in the procedures for the new system's selection and implementation10. As a result, practitioners thought of the new system as another administrative tool, which would be imposed upon them and their practice.

In the light of these findings it appears that, for social workers, the notion of participation in organisational procedures such as the implementation of a new MIS seemed to be an additional burden. However, it is an interesting point that in Case Study A the project team invited all the staff members in social work teams to take part in the process of replacing the old MIS whereas in Case Study B the project team selected those who were considered to be 'fit' to take part. Organisationally this decision can be explained by either a lack of time and resources to be spent upon designing and implementing a staff involvement approach or as a conscious choice to involve staff who they thought were most able to contribute. It could be argued that they deliberately chose people who were already "computer-friendly" since they would be the ones least likely to need everything explaining, or to raise objections. Participants from case study A were also more aware of what was currently taking place in their organisation than participants from Case B.

In conclusion, it was illustrated that practitioners' participation depended on the information they received before the actual procedure commenced, on the feedback they were given including the evaluation of their contribution and finally, on the organisational environment within which they worked. Information was usually disseminated via traditional channels of communication, such as e-mail and electronic newsletters. This analysis showed that these channels were not sufficient when information was directed to busy professionals such as social workers. In addition, feedback should have been given more often and probably at team level, if not individually, to ensure that people felt valued in their working environment.

[10] It has to be noted that only one of them participated in those procedures.

7.3.2 Team Managers

Role-ordered matrix	Table 7.3.2 Participation - Team Managers
Teams Managers – Case-Study A	1. They identified information & recording needs for their teams- TM1 2. Unsure as to how much their views were taken into account – TM1 3. Lack of time & caseload constrain participation – TM2 4. Opportunities to engage with the project were given but it was down to individuals as to how they would participate – TM2, TM3
Teams Managers – Case-Study B	1. Degree of involvement varies among TMs - They were involved in deciding what info they need from the system (2 out of 6) – TM1, TM2, TM3 2. E-mail was the main source of information = not very successful – TM1 3. On practitioners' participation: they should have been involved more – TM2, TM3, TM5 4. Involvement approach=one-way process without opportunities for feedback – TM3, TM4
Similarities:	• Identification of recording & information needs • Opportunities to participate were given but not real engagement • No feedback given
Differences:	• Degree of team managers' participation varies between the two cases/Case B IT staff selected who participated • Case B recognises that there were communication constraints • Case A identifies workload as an important constraint • Case B TMs think that practitioners should have been involved more whereas Case A TMs think that opportunities were given but people chose how much they would participate

The issue of participation in the new system's implementation had a major bearing on team managers. They were more involved than their staff as they had to attend the implementation meetings for the organisation and then focus and carry out the implementation for their team. Thus, it was expected that their degree of participation would be higher and that this would have a major impact on the project in general. In both case studies TMs took part in identifying their teams' information needs. In Case Study A, all team managers were involved in that process whereas in Case B only two out of six were included.

However, the process of engagement with the project was not particularly pleasant as it added more deadlines to the team managers' agenda. It is particularly

interesting therefore, to examine the degree of choice whether or not to participate in organisational processes. For the team managers in Case A participation was mandatory for each one of them but at least they were given the opportunity to take part. However, in Case B team managers that were not selected could not participate and therefore their teams were not represented. In general, TMs in Case B felt that the involvement approach used was a one-way process, only transferring information and directions from the top of the organisation to the bottom. They also thought that practitioners should have been involved more in the early stages of the system's design as they were better at describing their information needs.

Team managers from Case A stated that workload was another constraint to participation. Nevertheless, they all thought that this situation would be improved once the new system was up and running and that the changes would offer them more time to spend on other organisational activities. However, they found themselves in an extremely difficult position when they were asked to participate in the new system's implementation and to familiarise their teams with it due to the additional tasks this involved. TMs from Case B viewed participation, not as an extra task, but as an opportunity to represent their teams. This might be because not all the team managers took part so those who did considered themselves to be fortunate.

Whatever the type of participation, TMs from both Case Studies recognised the lack of feedback, since the process started, as a weakness. They had been able to express their views and needs but at the time of interviewing they were not entirely sure whether these were taken into account. As in the case of practitioners, difficulties to communicate and the use of communication channels, which do not appeal to busy people like social workers, led the whole process into failure. This was a result of misunderstandings and another example of communication failures caused by the inability of the organisation to understand that different professional groups have diverse needs in terms of receiving and processing information.

In conclusion, team managers from both Cases did take part and this allowed them to familiarise themselves and their staff through the implementation process. Although they identified several weak points in the approach followed to involve staff they also recognised that there were opportunities to participate but it was also down to individuals to choose whether to take part or not. However, the points they described as weaknesses could threaten future organisational processes.

7.3.3 Senior Managers

Role-ordered matrix	Table 7.3.3 Participation - Senior Managers
Senior Managers – Case-Study A	1. Staff were involved in various ways e.g. in information gathering in order to inform decisions – SM3 2. There was a planned approach to involving staff – SM2 3. Their involvement was valuable – SM2, SM1 4. SMs included on project board – SM3, SM1, SM4 5. Some teams were more successful than others in utilising the approach – SM5
Senior Managers – Case-Study B	1. The system was chosen by the IT people – SM3 2. SMs were involved in meetings on how it was going to be utilised – SM1 3. On practitioners' participation: staff were involved in implementation but not in the selection – SM2, SM5 4. Project team made an effort to engage staff with the system but the involvement approach was not so effective – SM5
Similarities:	• Staff were involved in a variety of ways • There was a planned involvement approach in both cases
Differences:	• IT staff chose the system in case B • In case A staff had more options regarding the selection • Planned approach to involving staff but not very successful in case B • Each team had a different degree of participation in case A

Senior managers participated in the project either by being a member of the project team or by taking part in the general consultation process. From each Case Study one SM did not participate to the same extent as the others did; this was expressed in the interviews as a personal choice. However, SMs thought that most of their staff had participated and that from this participation the project team had gained valuable information.

The identified similarities between the two Case Studies regarding participation were as follows, a) staff were involved in MIS implementation in a variety of ways and b) there was a planned approach for staff involvement but in both Cases SMs recognised that it was not very efficient. Their view that their staff were involved in several instances of MIS implementation derives from the fact that they were members of the project board so they were informed of the procedures involving staff. They also knew the activities in which their staff was involved, showing that the project team had kept them well informed. Senior managers recognised that the

involvement approach was not a complete success as they could identify areas where people did not take part. They stated that although there were opportunities for participation the effort made by the project team was insufficient. However, in Case Study A, SMs stated that some teams had been more successful in participating than others. This was attributed to each team manager's initiative to carry out the requested processes in order to successfully use all the opportunities available.

Differences between the two Case Studies were found regarding the selection of the system. SMs in Case B said that staff had no involvement in this decision and that it was the IT people who selected, which system to implement. However, in Case A, SMs confirmed that social workers and team managers had made a clear contribution to the selection of the system through consultation workshops. This difference is evidence of organisational diversity between the two Cases. In Case B the management made an explicit choice not to involve practitioners in the early stages of system selection. This was not down to the financial cost or to a lack of resources but a conscious decision. The project manager stated that the reason for this was because: "*practitioners culturally and traditionally have had very little to do with information*" which was an interesting observation given the rapid advance in domestic use of computers in the UK and elsewhere, and might be regarded by some as unwarranted discrimination (IT1 Case B).

The next difference between the two Cases is a consequence of what was described above. SMs in Case B stated that there was a planned approach to involve staff but there was insufficient emphasis given to the responsibilities of the project team on that issue. In contrast, SMs in Case A thought that the involvement approach was not fully utilised because some teams did not make the effort required of them. So, for senior managers, the fundamental difference between the two Cases lies within the context of responsibility upon which staff participation depends. In both Cases there is an obvious detachment of SMs from the project and from the responsibility for successful implementation. The direct implication of this is that, although SMs had an active role in MIS implementation they did not consider themselves to be responsible for the implementation or the unitisation of participation opportunities. For instance, practitioners and team managers both indicated that workload pressure made it difficult for them to participate in the procedures for the new MIS

implementation. However, in both cases senior managers did not take any initiatives to facilitate staff participation by reducing their workload, for example.

It can be concluded that, firstly, SMs were very well informed about the extent to which their staff were involved in the procedures of implementing the new MIS. Secondly, they kept a communication channel open with the project team but not necessarily with team managers and social workers. Finally, they did not recognize that there were difficulties, which prevented social work staff from taking part. This communication gap was not only their responsibility but they could have initiated a forum to encourage an exchange of ideas and information with their staff. For example, reflecting on what was learned after participating in a workshop could help to smooth the progress of MIS implementation.

7.3.4 IT Staff

Role-ordered matrix	**Table 7.3.4 Participation - IT Staff**
IT Staff – Case-Study A	1. Staff consultation did take place utilising various methods e.g. champions groups – IT2 2. Staff chose not to take the opportunity to participate & send administrative staff – IT3 3. Team managers did not support the project=less participation for their staff – IT5, IT4 4. There was a quite high level of information provision – IT3
IT Staff – Case-Study B	1. Traditionally practitioners have very little to do with systems – IT1 2. Practitioners are pre-occupied with operational concerns; it is not their job to think about IT systems – IT1, IT4 3. Practitioners were not formally involved in the decision-making process but in business-modelling – IT2, IT6
Similarities:	• Practitioners had the opportunity to participate but not all of them preferred to • Team managers' role was very important in engaging their staff with the system
Differences:	• Practitioners in case A were involved in both the selection of the system & business modelling whereas in case B they were only involved in business modelling

This group consisted of people with varying responsibilities participating in the project team implementing the new MIS for each organisation. It is worth mentioning their surprise when they were asked about participation of social workers in the design, development and implementation of MIS. They replied that they could not see

the social workers' role in these processes. The main reason for this was that as both organisations bought "off-the-shelf" systems it was simply a matter of giving the system provider information needs and requirements.

In both Case Studies IT staff stated that there were plenty of opportunities for practitioners to get involved. However, they argued that social workers, because of the nature of their work, could not abandon their day-to-day duties in order to spend time sorting out a new MIS. Nevertheless, they said that practitioners preferred not to take part despite being invited to do so by the respective project team. Additionally, IT people identified the team managers' role in keeping their teams informed of the procedures as a common threat to the project's success. It was claimed that team managers did not assist their staff nor did they encourage them to take part. As a result, a number of social workers did not get involved and they were confronted with the new system when it was nearly ready to be implemented. IT staff did plan an involvement approach but it suffered from communication problems, from lack of incentives for staff, and finally from not being advertised appropriately within the two organisations.

The important difference between the two organisations regarding participation shows a fundamental contrast in terms of management approaches. In Case A, social workers were consulted in both the development of the new MIS and in the formation of the new business processes. In Case B, however, social workers and team managers were only involved in business modelling. This is a contrast that illustrates the importance managers within an organisation give to their staff when it comes to decision-making. The task of replacing an old MIS with a new one meant cultural changes for the organisation in general and for practitioners' work in particular. Social workers' perceptions of what should be changing and how to fit whose needs and why could have been taken into account as this would have secured minimal resistance to the changes and a smooth transition from paper to electronic means. In short, both project teams made an effort to involve people from all levels of the organisation but the organisational structure hindered a more participative approach.

In conclusion, this section discussed the similarities and differences between the two Case Studies by comparing each group with its counterpart. Gaps in communication and misinformation were identified, as well as a tendency to hold certain groups responsible for the lack of success of the involvement approach. A

main difference which must be noted is between team managers and senior managers. The former group recognised workload pressure as an obstacle to participation whereas the latter group thought that team managers did not engage sufficiently for their teams to be fully involved in the processes. This offered a clear picture of misunderstandings and confusion over responsibilities, which affected organisations in terms of effectively implementing the new projects.

7.4 Management Information System

7.4.1 Practitioners

Role-ordered matrix	Table 7.4.1 MIS - Practitioners
Practitioners – Case-Study A	1. MIS made nature of work more structured – SW1 2. The way system works contradicts with the way social workers would like to work – SW4 3. It is a recording & monitoring tool – SW3 4. MIS does not serve practitioners needs – SW5 5. Communication & data accuracy is improved – SW2
Practitioners – Case-Study B	1. Help on accessible information/knowledge – SW4 2. Social work practice moves towards becoming an admin profession – SW2 3. Practitioners with long experience become anxious – SW3 4. System has a 'tick box' structure, which constrains practice of social work – SW1 5. Communication between different professional teams can be improved – SW5
Similarities:	• Nature of practice changes to become more structured • Social work becomes an admin profession • Communication is improved
Differences:	Case B: Anxiety among practitioners More information and knowledge is available

Three common issues were identified between the two groups. The first was the awareness of change in the nature of social work practice instigated by the new MIS. Practitioners stated that their work became more structured as they now had to record everything on a PC and fill boxes to describe their client's needs and social, psychological or health conditions. This was inconsistent not only with the way in which they used to work but also with their conceptualisation about what social work means (i.e. working with people not with PCs). One could argue that this is a form of resistance to ICT applications. Social workers do not resist ICT itself but rather the

changes, which it brings that, affect their daily practice. They also perceived the system as a new way of monitoring them and expose all their professional weaknesses to everyone. They also claimed that the system did not serve their needs but instead those of their managers.

Related to this was the belief that social work transformed into an administrative profession as social workers had to spend so much time working in front of a computer instead of working with clients. This is another form of resistance to ICT, viewing it as a factor which hinders social workers from doing what they are supposed to do. In other words, social workers linked ICT and its applications with alienation from their work and their clients. However, it has to be mentioned that "recording" is not new, it has always been a vital component of social work practice, and people did it even though it was often tedious and time-consuming. Records are a vital part of planning future decisions and interventions, they are absolutely essential where statutory duties are concerned, and many regard it as a fundamental "tool" of social work.

Practitioners acknowledged that the new MIS would improve communication both within the organisation and with other organisations like NHS. They were able to recognise some of the advantages of the new system but they could not understand why they had to work differently than before. This cannot be attributed to their inability to see beyond their individual needs but rather can be explained as a cultural deficiency of the organisation, which fails to transform organisational goals so that they are acceptable to the individual. A difference identified between the two groups was that in Case B social workers thought that colleagues with long experience in the sector were more anxious about the new changes compared to new social workers who had just joined the organisation's workforce. This anxiety reflected a general resistance to organisational change.

7.4.2 Team Managers

Role-ordered matrix	Table 7.4.2 MIS - Team Managers
Teams Managers – Case-Study A	1. Accountability, monitoring performance, reaching targets & timescales – TM1, TM4 2. Human interaction is reduced – TM5 3. Ticking boxes structure – TM4 4. Great amount of information but not necessarily knowledge – TM5
Teams Managers – Case-Study B	1. Launch of the system will have an obstructive impact = work will be slow – TM3, TM4 2. Improvement in performance scrutiny– TM3 3. Monitoring their staff's work - TM3 4. Increase staff's effectiveness in dealing with caseload – TM2 5. Accuracy of data – TM6
Similarities:	• Improvement of performance & effectiveness • Monitoring staff • Extensive data quantity & accuracy
Differences:	• Case A: Information ≠ Knowledge • Case B: Obstructive impact in the beginning

Between the groups of team managers three main similarities were identified. Interviewees agreed that the MIS would improve the performance of the teams and individual efficiency because everyone would have to check the system prior to taking any action. This would also help ensure accountability and responsibility. Team managers would also be able to monitor their staff and case progress via their computer, which would take less time and improves results. Achievements within social care teams are measured by performance indicators and reaching targets within timescales. As the pressure on team managers and their staff to accomplish these goals had increased greatly the MIS was bound to help them with supervising their staff. However, team managers from Case A felt that this could reduce human interaction within teams and relationships between colleagues would be difficult to develop.

Team managers also thought that the new system would improve the accessibility and accuracy of a great deal of data and information. Client data would be recorded and analysed in a standard form in order to produce statistical reports for the organisation itself and the DoH. However, team managers were not sure how they and their teams would benefit from the new advances. This insecurity over the changes in practice and the impact of information availability created further

obstacles for team managers as although they were conveyors of this information, their knowledge about how to use it efficiently was incomplete. They knew that it should help them to develop new frameworks of practice, make informed decisions and service planning but the lack of an acceptable format did not enable them to consider its practical implementation.

The first dissimilarity between the two groups of interviewees was regarding the use of the stored information. An excessive amount of information would be available but this did not necessarily mean that knowledge would also be obtainable. Team managers in Case A felt that it was very good to have all that data available but wondered where all this information would lead the team and the organisation in general. They believed that it had to lead towards critical analysis of interventions, decisions and goals.

For team managers in Case B matters of practical consideration were more important in their conceptualisations about the system. The danger of their work being delayed and the team's responsiveness to the needs of the client being hampered for the first six months of the system's implementation was a major concern. Moreover, the lack of complete action plans for such circumstances was apparent. Team managers felt insecure about how they were going to manage difficulties resulting from the system's implementation. Although they could recognise the long-term effects of the system on the services provided, in the short term they had to deal with expected interruptions caused by adjusting to the system. The solution came from the project team which decided to run the system for the first six months with the administrative staff doing all the recording for the social workers. This was expected to offer social workers more time to gain confidence in inputting the data and to adjust to the system's demands. Team managers argued that this solution ought to mean that there would not be any impact on the services provided.

7.4.3 Senior Managers

Role-ordered matrix	Table 7.4.3 MIS - Senior Managers
Senior Managers – Case-Study A	1. Managerial processes are improved – SM3 2. Managing the teams is easier – SM4 3. Data & information is more accurate – SM1 4. Data overload & time required to spend on it – SM5
Senior Managers – Case-Study B	1. Increase effectiveness of service delivery – SM3 2. Accuracy of records – SM6 3. Inform service planning – SM3 4. Concerns on overflowing data & how is it going to be transformed into useful information – SM5
Similarities:	• Managing service & resources is more feasible • Accuracy of records • Data overload
Differences:	• Case A: Time spent on making sense of information • Case B: Transformation of data into information

The perspectives of senior managers on MIS differed from those of the two previous groups in terms of what they considered to be most important. Between the two groups the following similarities were identified; managing service and resources (both human and financial) becoming feasible, records would be more accurate and finally they observed that there would be data overload from using the system. Regarding managerial processes, senior managers believed that implementation of the system would facilitate the management of service and personnel. Processes such as case progress or allocation of resources become simplified and consequently less time demanding. Staff development and training, supervision, and cooperation among teams were also straightforward procedures and they could be monitored electronically. As a result service delivery would be freed from delays and unnecessary bureaucratic checks. SMs expected to be able to improve their decision-making and service planning as a consequence of more accurate records that would result from practitioners doing their own record keeping. Utilising the MIS which produces reliable reports facilitated SMs work and created organisational relationships of cooperation with external agencies.

The difference between the two groups was located in how they considered the issue of data overload. In Case A senior managers were concerned with the data management and how much time it required whereas in Case B SMs were more concerned with the transformation of data into information. On the one hand, in Case

A the interviewees discussed the possibility of having to spend more time controlling the amount of data they received, especially in the months following the MIS implementation. On the other hand, in Case B SMs thought that the system would produce the reports that the DoH required but when it came to transforming data into information for individual needs they were unclear about what their information needs really were. Senior managers could see that the system was going to capture data but they could not think how this data could be useful to them if it was not in a suitable format.

In summary, the issues the group of senior managers raised were mainly concerned with the improvement of managerial processes and the production of data. This illustrated that these interviewees were aware of the changes and their impact on social work practice and in service delivery; however, they demonstrated that the MIS was essential for their work as managers. They gained advantages from using it in their work such as easy access to information. They thought that the MIS would be a valuable assistant, which facilitated their work by eliminating obstacles deriving from lack of communication, time delays or inaccessible record files. In general they believed that their working life would improve, which resulted in them being more capable of leading staff.

7.4.4 IT Staff

Role-ordered matrix	Table 7.4.4 MIS - IT Staff
IT Staff – Case-Study A	1. Increase staff effectiveness & performance – IT6 2. Save on time & form filling – IT4 3. Collect precise data – IT5 4. Managing information accurate DoH returns – IT6, IT1 5. No great impact on the service outcomes- IT1
IT Staff – Case-Study B	1. Practitioners' skills are enhanced – IT6 2. Better workload balance - IT1 3. Big challenge=link the system with other systems e.g. Mental Health Trust, NHS – IT3 4. Saving time=Increase effectiveness of service delivery – IT2 5. Service outcomes would be informed=better judgement/assessment - IT2
Similarities:	• Accurate information=accurate returns=secure funding • Skills improved=Better staff performance
Differences:	• Case A: No great impact on service outcomes • Case B: Communicate with other systems • Informed outcomes=better outcomes • Ownership of data

IT staff agreed in both Cases that the new system would produce accurate information provided that practitioners inputted the data into it. This in turn led to accurate reports for the DoH being generated and thereby funding was secured. Secondly, IT staff foresaw that social workers' skills would be enhanced, resulting in improved performance which would, in short, lead to all the above. For IT staff implementing a new MIS in social services was a challenge because they had to replace an old virtually un-used system, to build up the staff's trust in it and meet all the other goals set by the E-Government agenda. So, certain priorities were established and it was necessary to strictly adhere to them. In their view, despite the difficulties, they did a great job because they followed instructions given from the DoH that came from the top of the organisation.

The second similarity was that of improving practitioners' skills and consequently their performance in the long-term. IT interviewees believed that the system would offer opportunities to advance their work by making it more structured with the new business processes proposed by the MIS. Therefore, it was expected that

the impact of MIS for practitioners would be that they became more responsive, and with advanced skills.

Between the two groups of IT staff, the following differences were identified. First, in Case A IT staff mentioned that although major changes were expected within the organisation they did not believe that the MIS would have a great impact on service outcomes. In Case B the interviewees pointed out that the service outcomes would be based on informed decisions and planning which is supposed to make them better. So IT staff in Case B expected that service outcomes would be improved sooner or later with the MIS utilisation. A different point made by interviewees in Case B was that of communication with other MIS of different organisations. IT staff saw that as a challenge although it was on their agenda for a long time.

Another interesting point mentioned by IT interviewees in Case B was the ownership of data by practitioners. IT staff recognised that transferring the organisation from administrative input of data to practitioner input would mean that practitioners would be able to control and manage their data and the information within the system. If the data they inputted was of poor quality then the information extracted from the system would be of poor quality too. Thus, practitioners had a choice about how well they wanted to work with the MIS.

In summary, it was made apparent that both groups of IT interviewees believed that the implementation of the MIS could provide organisations and practitioners with accurate information and accurate reports as well as saving time for practitioners and team managers. The interviewees also had differences in terms of issues they identified as emerging concerns according to their organisational context. It is interesting to note that although IT interviewees in general were quite judgmental about social workers in terms of data ownership they recognised that as they would be inputting the data to the system they would also be responsible for its quality.

7.5 Social Work Practice

7.5.1 Practitioners

Role-ordered matrix	Table 7.5.1 Social Work Practice – Practitioners
Practitioners – Case-Study A	2. No major changes in services outcomes – SW5 3. Changes in how social workers deliver their work – SW2 4. Structured approach (tick boxes) – SW1 5. Social workers become deskilled – SW4
Practitioners – Case-Study B	1. Practice becomes computer-driven rather than client-driven – SW1 2. Ticking boxes is not what social workers do – SW2 3. No major changes in services outcomes – SW3
Similarities:	• Changes in practice of social work – computer vs. client • Fears of deskilling • Structured approach
Differences:	

In this section three main similarities were identified and there were no differences between the two groups of interviewees. So this analysis, based on their perceptions of how their practice has changed, showed no disparity between two completely different councils and service groups.

The implementation of the new MIS meant changes in the organisation in general and in social work practice in particular. Social workers faced difficulties in adjusting to the change because over a very short period of time they had to be trained to learn new IT skills or to enhance their existing IT skills in order to input data into the new information system. Transferring the task of data input from administrative staff to social workers completely changed the way in which social workers functioned because it demanded new computer-based skills i.e. typing skills (e.g. speed), adjustment to the new computing environment. For most of the people who had been in the job for ten years or more these changes created anxiety about job security and added more complications in an already stressed working environment. As many of them stated “I didn’t come into social work to work with computers” it was obvious that the organisational change resulted in a crisis about their professional identity. A change in business processes (the way in which each team carries out its duties in order to fit in with the system) represented for social workers a shift away from the way in which they had been working for a number of years. This kind of change influenced how practitioners approached the new system when it was

implemented. Even two months after implementation they still struggled to understand how to work effectively with it.

The main issue for this group was the transition from client-driven to computer-driven social work practice. Social workers felt that their work with their clients would be constrained because they were increasingly requested to use computers to deliver services and maintain their records up-to-date at all times. They seemed unable to understand why they had to spend so much time in the office in front of the PC instead of being with their clients.

An additional fear expressed was that of practitioners' deskilling. At the time of interviewing, practitioners had completed or were going to complete an IT skills training on how to use the new system. The amount of time spent with computers rather than with clients perhaps explains that fear. It is another example of the insecurity social workers felt created by the inconsistency between social work values and perhaps insensitive choice of managerial methods and tools in order to accomplish their working goals. In their minds, these two concepts were incompatible and created a contradictory context of work.

7.5.2 Team Managers

Role-ordered matrix	**Table 7.5.2 Social Work Practice – Team Managers**
Teams Managers – Case-Study A	1. TM's job becomes more bureaucratic, more managerial – TM3 2. Service planning & practice is informed from the information gathered – TM1 3. Social worker's difficulty to adjust – TM3
Teams Managers – Case-Study B	1. Social worker's deskilling – TM6 2. Danger of losing staff due to increase of bureaucracy – TM4 3. Changes on practice will cause more problems for TMs – TM2
Similarities:	• Social workers become deskilled as their job becomes more bureaucratic • Difficulties for TMs' work
Differences:	• Case A: Recognition of system's outcomes for planning and practice • Case B: Increased bureaucracy drives staff away

Team managers discussed various issues related to social work practice and the impact of the changes initiated by the MIS implementation. Team managers focused firstly on the nature of their job, which became more bureaucratic and managerial. This was an example of reducing professional discretion and promoting a structural approach to management. Every activity can be carried out through the system, which in a sense alienates people from each other. The possibilities offered by the system for case allocation or monitoring case progress created a mechanistic environment where the TMs did not need to leave their office in order to check upon their staff.

Team managers also paid attention to practitioners' deskilling. They thought that accountability was useful and that social work practice in the context of Local Authorities was under constant change, which with the added demands of MIS required more time than ever to keep on top of things. They recognised the cultural shift required for practitioners to input data into the new MIS; however, they agreed that this would ensure greater accuracy of data (which was not the case with the previous system). Practitioners would have to learn to work under new conditions in a new environment, which was now office-based rather than client-based although the used to do that before the MIS but perhaps in a less extent. Another implication of the cultural changes taking place was around managing the changes. Team managers thought that this was a big challenge for them with implications for their staff's efficiency. They estimated that they would need around a year to comprehend those changes and for their staff to adjust to working with the system. They also stated that the first year after implementation would be complicated as there would be a backlog of cases because of time constraints on social workers.

A difference identified between the two groups was that interviewees in Case B stated that social workers chose their profession because what they most enjoyed was human interaction and offering help to underprivileged people. Because of this they tended not to be very good at meeting bureaucratic demands imposed for reasons of either control or accountability. When they were required to work in an office with a computer rather than with a human being they became anxious. As a result they might think of changing jobs. Social workers are difficult to recruit and a team manager stated that one reason for this was the demand to "*work in a self-contained workstation where you do all the inputting, everything is down to you and so you will become a very efficient holistic worker rather than a social worker, a therapist or*

practitioner" – TM4 Case Study A. A positive change identified by TMs in Case A was about system outcomes for service planning and practice. Team managers discussed the endless possibilities of being able to have accurate data on which to base one's decisions for future planning. Service outcomes would also be informed with structured client knowledge, which led into better understanding of people's social needs.

7.5.3 Senior Managers

Role-ordered matrix	**Table 7.5.3 Social Work Practice – Senior Managers**
Senior Managers – Case-Study A	1. Staff have to follow processes in a more structured way – SM4 2. Decision-making is facilitated through the system – SM5 3. The MIS will help practitioners to become more effective – SM5 4. Resistance in MIS use expected to exist – SM3
Senior Managers – Case-Study B	1. Contradiction between the business of social care & the professional ideology of social work – SM6, SM5 2. Changes in the social care organisation processes – SM4 3. Threat to face-to-face work with clients – SM1 4. Information must return to practitioners – SM4
Similarities:	• Changes in social work process and in organisations
Differences:	Case A: Facilitation of decision-making Resistance to MIS Case B: Threats to social work Information must return to practitioners

Regarding the thematic category of social work practice there was identified only a similarity between the two groups of senior managers that of the overall change in social work processes and the organisation as a whole. Senior managers in both Case studies believed that changes in social work practice appeared in the form of following procedures more strictly and that procedures changed in order to comply with the system. Organisational procedures became more important and directed the work of the social workers. The result was a more structured way of responding to clients' needs based on the system rather than on professional judgement. Even for the senior managers this directional way of functioning was not what they had been used to until now.

In terms of differences it is important to note the issue of resistance to MIS use which was identified by interviewees in Case study A. Resistance to change was expected after its initiation and could have had serious effects on practice or the organisation. It was really important for the organisation that senior managers were able to recognise this issue and work towards ameliorating it. They also considered that the MIS would facilitate decision-making for them but also for practitioners as they expected that the system would help in managing and disseminating relevant information to all end-users.

Senior managers in Case B were more concerned with the possibility that social work might abolish its main function of face-to-face communication with the clients in order to deliver services to them. This issue was raised across the interviewee groups because they all could see that MIS utilisation was going to demand more time spent in the office rather than in the field. In the long term this could be a serious problem if practitioners and team managers were not able to manage their time skills. Senior managers also claimed that in order for practitioners to be engaged with the system the data entry was not enough. Rather, it seemed important that the data they inputted should return to them in several useful formats from which they could make sense of their practice, reflect and learn.

7.5.4 IT Staff

Role-ordered matrix	**Table 7.5.4 Social Work Practice – IT Staff**
IT Staff – Case-Study A	1. Day-to-day practice changes – IT2 2. Social workers had not realised the impact of changes – IT2 3. Social workers get to use the official business processes – IT2, IT6
IT Staff – Case-Study B	1. Informed practitioners – IT6 2. Practitioners must understand what data the organisation needs & own it – IT1 3. Better quality of information is feasible– IT1 4. Information sharing – IT5
Similarities:	
Differences:	• Case A: Practitioners follow business processes • Case B: Practitioners are more informed, They need to own their data

It was found that the two groups of IT staff approached the thematic category of social work practice in a dissimilar way. IT staff in Case A considered the changes in the day-to-day practice of social workers to be very important and their perceptions were that social work practice changed because the business processes were altered. However, they were not sure how to address the practitioners' point of view that their work would involve working more with the computer rather than with the client. IT staff from Case B expected that practitioners would be more informed about their practice as they would expand the data through the system. The claims of Case B interviewees about practitioners' data ownership demonstrated their affiliation with the system's outcomes for its users. This generated a dual function for practitioners that of being data entry people and data owners. This led to a new form of applying social work practice as it added an additional responsibility for social workers. In addition to inputting data, practitioners needed to make sense of it, interpret it on behalf of the organisation and perform their role according to what is produced.

The contribution of this section to the rest of the analysis and to the thesis in general was to illustrate interviewees' perceptions about social work practice and how it would be affected by the implementation of MIS. It also made links between social work practice and data accumulation, information management and organisational knowledge.

7.6 Organisation and Organisational Knowledge

7.6.1 Practitioners

Role-ordered matrix	Table 7.6.1 Organisation and Organisational Knowledge - Practitioners
Practitioners - Case Study A	1. Difficulties in achieving change from paper to computer use – SW4, SW5 2. Organisational learning & knowledge are achieved through supervision & team meetings, the system cannot contribute to that – SW4, SW1 3. Sharing information & communication are enhanced through the system – SW5, SW1, SW4 4. Different levels of competency & IT training hinder the full use of the system & consequently organisational change – SW5, SW2
Practitioners - Case Study B	1. Practitioners moved very slowly towards understanding what a MIS meant – SW2, SW3 2. Organisational knowledge & learning occurs on informal networks – SW1, SW5 3. Collection of information does not mean analysis & dissemination – SW1 4. Sharing information can be really exciting in a multi-disciplinary way but there is not an established formal network to do this– SW5, SW4
Similarities:	• Difficulties in understanding & adjusting to organisational change • Sharing information is important & can be improved • Use of computers is not going to produce knowledge
Differences:	

The main issues discussed here were the impact the new MIS would have on social care organisations and establishing links between MIS output and organisational knowledge and learning. They discussed the issue of organisational learning and knowledge, in addition to the new possibilities for information sharing and better communication in internal and external relationships. Identified similarities between the two Cases for the group of practitioners are; a) difficulties in understanding and adjusting to organisational change, b) the importance of information sharing and how this had improved with the use of MIS, and c) an acceptance that the use of computers was not going to produce organisational knowledge. In this thematic category there were no differences identified between the two groups.

Information sharing had always been a challenge for the social services, especially when involving exchanges with external organisations or other teams from

the same organisation. In particular, the sharing of confidential information about clients with GPs, nurses and other professionals often met with obstacles such as those related to the Data Protection Act. Social workers in both Cases could foresee that situation changing with the use of a web-based information system through which one could send information or make a case referral with security. For the organisation itself this meant facilitation of processes, accuracy of data transferred and of course, less time spent on issues of safety. Social workers also found the idea of systems communicating with themselves particularly interesting especially with the NHS which most of them referred to as a rather complex area of communication and cooperation.

Practitioners in both Case studies were unable to identify any possible ways of producing organisational knowledge and learning via the MIS. Instead they preferred the current method, which involved their participation in team meetings, supervision with their team manager or senior practitioner or peer supervision. This informal network produced knowledge for their practice and covered their learning needs. However, one participant from Case B, whose team was split in different offices across the council, recognised that this network did not work as well as it did in the past, which demonstrated that it was necessary to find alternative ways of responding to knowledge and learning accumulation. There were several reasons that explained why social workers could not see MIS contributing to these processes. Firstly it was clearly a human activity, which machines could not replace. Secondly they seemed satisfied with the way the scheme was functioning at the moment. Finally, during their training none of the practitioners progressed far enough to provide themselves with information about the system's full potential. They were therefore able to employ the system only as a tool for recording data and not to use it as a reflective tool for their practice.

Although, practitioners hold a large amount of knowledge, which is used mainly at a team level, they could not understand the need for the organisation to have access to this information. Nevertheless, practitioners thought that the new MIS was a better way of recording information about their clients and they were able to transfer it into reports for external organisations such as governmental inspection.

In conclusion, IT training might be vital for the implementation of a new system but when an organisational change is initiated it is necessary to provide staff with a

clear conception of what that specific system can or cannot do. Front-line staff received less information than any other professional group, which in turn led to a lower degree of confidence in system's abilities.

7.6.2 Team Managers

Role-ordered matrix	Table 7.6.2 Organisation and Organisational Knowledge - Team Managers
Teams Managers – Case-Study A	1. Cultural shift from administration to practitioner inputting – TM2, TM3 2. Communication between teams is enhanced - TM6, TM4 3. Conflict over implementing the system & the running of the service – TM2, TM5 4. Organisation was not given much choice over system selection – TM3 5. Information sharing & knowledge generation can be improved & used to inform practice & decision-making – TM2
Teams Managers – Case-Study B	1. Managing the cultural changes is a big challenge – TM4, TM3 2. Resistance to IT from staff over 50 years old – TM4 3. Organisation will benefit, but in the long term – TM2, TM3 4. MIS can improve social work knowledge & information about service users – TM4, TM3
Similarities:	• Cultural changes • Difficulties to manage change • Organisational knowledge is improved
Differences:	• Conflict implementing the system & running the service in Case A • Not much choice over selecting the system in Case A • Resistance from staff in Case B

Team managers demonstrated an ability to understand the general issues around organisational learning and knowledge. Although they seemed focused on how their teams experienced the system's implementation, they also could understand that the organisation was under a general reorganisation due to several cultural changes. Despite the difficulties, team managers agreed that the organisation would benefit from the new MIS in the long term, when staff were sufficiently experienced at using the system to allow them to work more effectively. Team managers predicted that organisational knowledge would be improved as social workers would be recording their actions; however, they were not sure whether the system was able to produce

reports of this kind. This is an example of poor communication and lack of awareness of the capacity of the system to contribute to the transformation of data into knowledge. Nevertheless, it has to be noted that MIS were implemented across the country to facilitate recording and monitoring needs, and to facilitate knowledge management. Consequently, there was no clear indication whether or not social workers would receive something back as a compensation for recording their cases, interventions and actions.

Differences between the two groups could be divided into three categories. Firstly, there were those referring to a conflict of interest, secondly to reduced choice for the organisation to select the system, and finally, resistance by social workers. In Case-study A, team managers stated that there was conflict over the implementation of the system and the running of the service. For them, both tasks were important but the latter had priority over the former. They made an effort to include the implementation of the system into their daily activities and some of them were more successful than others in doing so. The degree of engagement was probably related to the team's caseload and especially to the team manager's workload, for example, the caseload of a referral and assessment team was different from that of children in a foster care team.

Another issue team managers from Case-study A discussed was the lack of opportunity for the selection of the system. They typically said that the organisation had little choice in this matter. This highlighted their desire to have been more involved, particularly when they realised that the system meant a total organisational change. As a result, team managers felt that they should have been involved from the early stages when the project team was selecting systems.

In Case-study B, team managers expected that the organisation would meet resistance from front-line staff in introducing the changes, in particular from people who had been in the profession for more than ten years. It was thought to be more difficult for these people to cope with the change and the new working environment. They tended to resist change because they were afraid of the unknown and they did not know whether they would successfully respond to increased demands by the organisation. Managers who developed special bonds with their staff tended to be more concerned about them than the organisation itself. This was contradictory to their role as managers and their assumed responsibilities but it also showed

compassion. In summary, team managers recognised that there would be positive outcomes for the organisation and that in terms of communication and knowledge production the organisation would experience good results on a long term basis, but both groups recognised that it would take time for staff to come to grips with the system.

7.6.3 Senior Managers

Role-ordered matrix	Table 7.6.3 Organisation and Organisational Knowledge - Senior Managers
Senior Managers – Case-Study A	1. Organisation is going through a deep cultural change – SM5 2. Whether that change will be successful depend on the extent to which people resist IT – SM3 3. Libertarian vs. structured ways of working – SM4 4. Communication is facilitated better in inter & intra-organisational levels – SM2 5. Information leads to rational decisions – SM1 6. Evidence-based social work- SM1
Senior Managers – Case-Study B	1. Seeking a cost-effective way to manage the cultural changes – SM5, SM6 2. Managing change: training support, lack of resources in LA – SM4 3. Fear of becoming a faceless organisation – SM1 4. The change is in social care organisation process not in professional ideology – SM6 5. Benefits for cooperation & communication with external environment – SM3 6. Information must return to practitioners in a certain format – SM2 7. Organisational learning & knowledge is improved – SM5, SM6
Similarities:	• Managing change: resistance, training, resources • Organisational change vs. professional ideology • Communication is facilitated • Enhancement of knowledge sharing & learning
Differences:	• Case B: Faceless organisation • Case A: Evidence-based social work

Senior managers identified several issues related to the organisation and the organisational change initiated by the implementation of the new MIS. In common with the former groups, this group recognised the cultural change as a big step towards reorganisation. The interviewees discussed the changes in social work practice as well as changes to organisational processes brought on by the use of MIS.

The main similarities between the two groups were as follows; a) managing the change, b) the meaning of organisational change for the organisation, its personnel and their professional value base, c) the facilitation of communication, and finally d) the enhancement of knowledge and learning sharing. Senior managers pointed out that organisational change depended on staff's resistance to IT, the amount of training staff received and the resources available from the organisation to support the change. Resistance to change was expected when organisations implemented a new policy, or in this case, a new information system. Resistance was mainly expected from staff who had worked for a long time in the same kind of job as these people found it more difficult to understand and adjust to change, for example, by switching to the use of PCs. Although, social workers were used to experiencing fundamental changes during their career, organisational transformations at the operational level could still create anxiety.

Organisational change introduced by technological innovation in social services was linked with changes at the operational level, at management level and in decision-making. These changes might have had an impact on social work practice but usually they could not affect the professional value base of social work as interviewees from Case B stated.

The final observation of communication facilitation and knowledge creation could not be delivered when social workers did not consider technology as part of their profession. The interviewees recognised that using the new MIS would improve these processes. Nevertheless, the system was a means of achieving both better communication and cooperation between teams and organisations and knowledge production, storage and dissemination. The extent to which this capacity was utilised depended on how the end-user of the system was trained and educated. The effective use of an information system demanded a high degree of analytical skills from the user and the ability to reflect on what the system produced. For instance, staff would realise the benefits of collecting information when they received that information back in a format, which allowed further interpretation. As a result, organisational knowledge could be built up and circulated within the organisation, with the ultimate goal being informed decision-making and planning. Organisational learning was then enhanced and able to support practice and management.

A variation between the two groups of interviewees was that in Case B a fear of becoming a faceless organisation was expressed, whereas in Case A there was the hope that in the future social workers would be able to offer an evidence-based practice. The disparity between the two groups lay with each other's ability to estimate the results of technology in the long-term.

7.6.4 IT Staff

Role-ordered matrix	Table 7.6.4 Organisation and Organisational Knowledge - IT Staff
IT Staff – Case-Study A	1. Transfer to a computer-based culture & from administrator input to practitioner input – IT5 2. Staff did not adjust to the new business processes IT3 3. Data quality is a prerequisite for knowledge generation & access to it – IT6 4. The system is a top-down one if it expands can provide knowledge – IT6 5. 'Social workers do not like others to know what they do' – IT6
IT Staff – Case-Study B	1. New way of working for practitioners=data input – IT3, IT4 2. Resistance to change and to IT – IT1 3. People who have worked for a long time it is possible to resist more – IT3 4. Knowledge generation will be bottom-up – IT6 5. Reports can be produced but there has to be a commitment from the practitioners that they will receive them & improve their practice – IT1, IT5 6. Learning opportunities - IT2, IT4
Similarities:	• Computer-based culture • Practitioner input • Resistance • Case B: Knowledge is a bottom-up process • Case A: Knowledge depends on data quality
Differences:	• Case A: Knowledge production is a bottom-up process/MIS is a top down process • Case B: Reports can be produced but it is up to practitioners how they will use them

Several common issues were identified between the two groups of IT staff in relation to organisation. The first and most important change for them was the creation of a computer-based culture in response to governmental goals of E-Government. However, to transfer a whole organisation from paper to computer was

a big step and it required immense effort for people to adjust to the new imperative. Moving from administrative input of data to practitioner input was one of the major changes the project team had to work on. Practitioner input was expected to secure accuracy of data, and to improve communication and monitoring. For these reasons, IT staff considered it very important to train social work staff in basic IT skills as well as on the system itself. There was also an effort made to prepare staff for the changes expected once the new system was implemented. However, IT staff recognised that despite their efforts staff did resist making adjustments to and using the new system. Resistance took the form of refusal to be involved in various procedures and of delegating the task to administrative staff instead. IT staff did not accredit this to the lack of a communication strategy but rather on the inability of practitioners and their managers to see beyond their operational level.

Regarding the generation of organisational knowledge, IT staff agreed that this was a bottom-up process because it depended heavily on data quality. Practitioners who inputted the data were responsible for its quality and efficiency. If practitioners were using the system poorly then it followed that the information produced would be of inadequate quality. They also referred to the need for the system to be expanded to be able to produce practice knowledge. However, IT people in Case A were cautious when referring to data quality because they believed that social workers might not like to report everything on the system where it can be seen by everybody. The role of front-line staff was recognised as very significant, as was the importance of staff being able to determine procedures such as generation of knowledge. However, it was questionable as to how well prepared staff were to input the right kind of data and to hold on to that powerful process.

A difference was identified in terms of the relationship between organisational knowledge, the role of practitioners and MIS. IT staff in Case A believed that knowledge generation was a bottom-up process in contrast with MIS which was a top-down system used to record information, to monitor staff and to produce reports for external organisations. Therefore, in Case A IT staff thought that although the system would record information input by practitioners it could not necessarily produce knowledge because it was directed by a top-down approach of control and power. However, IT staff in Case B thought that the system could produce reports, which were able to assist in the building of organisational knowledge. The interviewees said

that the success of this depended on how practitioners used the reports to produce knowledge. There was a profound contradiction between the two groups which was a result of deeper organisational differences. In this case it seemed that Case B was more open in discussing such a theme whereas Case A took a more conservative stance by transferring the responsibility to the system itself.

7.7 Conclusions to Cross-Case Analysis of Case-Studies A and B

This Chapter analysed the research findings using the method of cross-case analysis. In the first thematic category the research participants agreed that the implementation of the MIS created anxiety as well as frustration. They also recognised ethical dilemmas surrounding the practitioners work as the time with the clients was reduced.

In the second thematic category the analysis concluded on misunderstandings and confusion over responsibilities and communication. As a result practitioners' participation in the implementation process of the MIS was not as effective as it was expected to be. As an immediate consequence it was identified that practitioners resisted adjusting to the new business processes and to using MIS in general. It was also observed that there was a transfer of responsibility from the IT staff to managers and practitioners and the reverse as a major cause of difficulties in both Cases. Each group transferred the responsibility for the degree of social workers' participation to another group. Social workers said that it was due to workload and that managers did nothing to assist them with this so that they could be more involved. The IT staff stated that team managers did not encourage staff to participate whereas senior managers said that the project group did not use all the appropriate channels to pass on information and involve staff.

The third thematic category explored issues acknowledged from the participants regarding the advantages and disadvantages of the new systems. There were also differences among the respondents as to whether or not the system would assist in reducing paperwork and administrative tasks so that it might save time for work with clients (as the IT and senior managers stated). Conversely, practitioners could see bureaucratic procedures increase for them time to spend with the clients decrease.

Thus, the gaps in organisational communication, training and engagement with the MIS from the beginning reappear as an obstacle to social workers' adjustment to it.

In the forth thematic category of social work practice all research participants agreed that social work practice as a process of delivering services to clients would change through the implementation of the new MIS; it was also claimed that the tick-box culture on which the MIS was based would create difficulties in fitting clients' needs, practitioners' assessments or interventions. The senior managers and IT staff across the two Case studies also agreed that service delivery, accuracy and quality of information as well as monitoring staff's performance would improve by using the system. Last but not least the respondents discussed also two major changes that of transferring to a computer-driven social work practice instead of client-driven and from data input by administrators to practitioner input. Both elements consisted of major changes for social work practice it self but also for social care organisations as they meant also a culture change for them.

In the fifth thematic category the research participants identified the cultural changes that resulted from the MIS implementation as factors which needed to be managed for the organisation to be able to progress. In terms of organisational knowledge and MIS outcomes the links were difficult to establish, especially by practitioners as they thought that informal networks and team meetings were a better approach in sharing knowledge and skills. The other groups were able to identify possibilities of sharing knowledge and skills via MIS but in a context where practitioners would own the data they inputted and recognised the need for that data to be of a certain quality. I was also noted that more support and training is needed if for social workers in order to succeed in entering the correct data and receiving feedback on how to use the information afterwards to inform practice and decisions.

Chapter 8 discusses the research findings with related literature in order to establish links with similar literature.

CHAPTER 8: Embracing Literature: Linking Research Findings with Convergent and Divergent Literature

8.1 Introduction

After having analysed data using two methods of data analysis, within-case analysis and cross-case analysis, this Chapter embraces the data from both Case-Studies with similar and dissimilar literature, which was reviewed in the first three Chapters of the thesis. As it was outlined in the research methodology Chapter the analysis focused on data reduction. Thus, in order to make meaningful links with the literature, discussion in this Chapter will follow three themes; 1) Practitioners' Participation and MIS, 2) Organisation and MIS and 3) Social Work Practice and MIS in order to make meaningful links with the literature and draw conclusions. Each of the three themes discusses key findings in relation to the literature in order to reach conclusions presented in Chapter 9.

8.2 Practitioners' Participation and MIS

This section discusses the theme of practitioners' participation and MIS and encapsulates the research findings from both Case-studies, which illustrated what hindered participation of practitioners during the design and implementation of MIS. The discussion is organised into the following sub-themes identified in the research analysis: overwhelming workload, misunderstandings among groups of staff and communication failures, lack of adequate feedback, and organisational constraints such as the bureaucratic and managerialist cultures.

Overwhelming workload

Practitioners recognised the value of taking part in decisions that affect their work but they were unable to find the time for the actual process due to their overwhelming workload. Practitioners also expressed their disappointment and feelings of marginalisation about not participating fully in the project. As a result, practitioners avoided participation as much as they could. However, the importance of

practitioners' participation in the design and development of the MIS was noted by the majority of research participants in this study. Monnickendam and Eaglstein (1993) in their study of social workers in Israel found that the latter reported increased effectiveness and willingness to use the system when practitioners were offered the opportunity to experiment with the system before its full implementation. In this way they were able to participate in its development. This suggests that allocating time for experimenting with the system would have been also helpful for the practitioners in this study.

Practitioners' lack of involvement in the MIS implementation because of workload pressures and their minimum participation in decision-making in general affected how they felt about the MIS. This study demonstrated social workers' feelings of doubt, frustration, anxiety, and lack of choice, oppression, and feeling trapped. Acknowledging these feelings is the first step towards recognising resistance to MIS. Markus (2002) discussed the human factors which lead to resistance and consequently to failure. Looking at today's reality of social care organisations with the increased sceptical voices (Peckover et al, 2008; Pithouse et al., 2009, Pithouse and Broadhurst, 2009, Shaw et al. 2009a) surrounding CAF and ICS implementation in the child protection field it becomes apparent that human factors were not taken into consideration during planning and project implementation.

Misunderstandings among groups of staff and communication failures

The research findings also identified misunderstandings and confusion over who should have been responsible for ensuring that front-line staff were sufficiently involved. Participants from the IT group and the senior managers claimed that the team managers should have been more cooperative in implementing the project as this would have resulted in greater commitment from their front-line staff. In contrast, team managers stated that the project team should have involved staff from the beginning and should have sought ways to relieve them and the practitioners from their excessive workload in order for full engagement to be feasible. This is described by Senge (1990:19) as the 'syndrome of my position' and it occurs when people do not own responsibility for the results produced when all positions in an organisation interact. Instead they transfer the responsibility to their subordinates. Thus, it becomes very difficult to know who is responsible when a disappointing result arises. In both

Case Studies there was a difficulty in individuals taking responsibility when team managers, senior managers and IT staff were asked about practitioners' participation. Every group interviewed transferred the responsibility to the other groups, which is consistent with Senge's point.

Carillio (2005) has also pointed out that effective utilisation of IT systems in social care organisations requires the involvement of social work practitioners, in order to encourage comprehension of the computerisation process. In the Case-studies researched, the approach used to purchase and implement the new MIS, left little room for participation by practitioners and team managers alike. Additionally, Argyris (1964) argued that workers' growth depends on opportunities to be involved in administrative activities and on the ability to develop initiatives. In this respect the practitioners in this study were partially involved in the administrative activities but very little in developing initiatives as they were unable to suggest how their needs could be accommodated in the system. Equally, Riley and Smith (1997:314, 318) argued that for MIS implementation to be successful in social care organisations, the engagement and enthusiasm of senior managers is required in order to define information requirements and lead change. In this research study, the research findings provided evidence that the engagement of staff at all levels of the organisation was essential, in particular that of front-line staff.

Lack of adequate feedback

A further constraint in practitioners' participation was the lack of adequate feedback to them about whether or not the project team used their contribution in the MIS implementation. The project teams in both Case Studies employed conventional methods of communicating such as e-mails, paper and electronic newsletters. Nevertheless, these methods proved to be unsuccessful as the practitioners and team managers expressed difficulty in understanding how the system would affect their everyday practice and working life. Implementing an effective communication strategy is important when a new initiative is introduced because it creates a learning context for implementation i.e. learning from experience and resolving errors. The idea of 'double-loop learning' (Argyris and Schön, 1996) benefits participants because by solving a problem they also gain insights into the nature of that problem.

Cherin (2004:246) argued that it is very important to involve staff in determining the format and mechanisms of feedback as well as offering them the support to work with their own and organisational data. In this study giving and receiving feedback to and from practitioners on the project's progress was discussed as an area of concern. According to Senge (1990:73), feedback which indicates how actions can reinforce or balance each other is very important in the implementation of every kind of project. Thus, the research findings showed that feedback on the progress of the project, on the development of the staff and on how staff perceived changes within the organisation should have been sought by the project teams and by senior managers in particular utilising a process of dialogue and exchange of knowledge. As Senge (1990) suggested, feedback builds learning because it brings to the surface actions that occur again and again and thus staff is aware of the processes occurring within the organisation at certain points of time (ibid. 1990:73).

Organisational constraints

A bureaucratic and managerialist culture which does not facilitate interaction between the organisation and its employees may explain the reasons for the lack of practitioners' participation in organisational procedures generally and in MIS implementation in particular. In this study although practitioners acted with a certain degree of autonomy in serving their clients they did not hold the power to influence decisions or changes at an organisational level. According to Pfeffer (1997) in a bureaucratic culture decision-making is economy-oriented and the organisational culture does not promote interactions within the organisation. More interactions could result in more participation from all stakeholders in an organisation but under a bureaucratic culture participation is restricted and social workers remain on the bottom step of the hierarchical pyramid without the possibility of involvement. This study demonstrated that marginalised workers who try to cope and adjust to the imposed changes in their working practice and who very often develop their own mechanisms of coping (Lipsky, 1980), which is consistent with the research findings of this study.

In this study it was reported that discussions about policy implementation did take place in team meetings but practitioners did not think that this had an impact on how decisions were made in their organisation. According to Clarke et al., (1994)

practitioners' opinion is a result of managerialist strategies, which perceive professionals as consumers in a commercial relationship controlled by managers. Equally, the use of overly bureaucratic approaches which ensure outcomes by applying strict control measures on staff does not address staff concerns or issues, nor does it lead to the empowerment and participation of front-line staff (Sapey, 1995:5). Sapey (1995:5) also referred to the obstacles created by "top-down processes that focus on control and centralisation". This form of implementation risks alienating staff from their work and decreasing their professional discretion.

The apparent lack of practitioners' participation in decision-making regarding organisational procedures was a result of the management structure and model then used by organisations in the public sector. The culture of managerialism and quasi-markets introduced with the NHS and Community Care Act of 1990 and furthermore, the culture of 'value for money' and the 'Third Way' created a new context, which social care organisations have to abide with (Langan, 1994). These cultures assume control over professional discretion in order to secure effective use of resources (Adams, 1998). The limited opportunities for practitioners' participation and the lack of communication with line management were identified by practitioners in this study as the major difficulties they faced in being part of the organisation. This suggests that although the cultures of the organisations participated in this project may have reduced the waste of resources; they may also have created individualism among staff and alienated them from their organisation's purposes (Adams, 1998). This alienation of employees from their organisation does not facilitate staff participation or involvement but creates a climate that empowers managerial control and monitoring. Additionally, according to Baldwin (2000) managerialism marginalises social work values and brings about the end of professional discretion. The research findings for this study suggested that although practitioners sought to be involved in organisational procedures, the organisations failed to take on board that willingness and hindered their efforts.

Finally, on the theme of practitioners' participation and MIS, it has been argued that in order for MIS to be employed effectively in an organisation it needs to be understood and supported by the end-users, in this case the social workers (Sapey, 1995; Riley and Smith 1997; Bell et al., 2007; Shaw et al., 2009a; Shaw et al., 2009b). Thus, if their participation is minimal then it is to be expected that they will not

understand and may be reluctant to support the system's operation. They might work with it because it is mandatory but they will not own the data they enter nor appreciate how this data can be translated into a tool that is beneficial for their practice. This could be perceived as another result of employing ineffective communication strategies, as described above, to keep the personnel up-to-date as well as attract and engage interest in a project.

8.3 The Social Care Organisations and MIS

This section discusses the implications of MIS implementation for social care organisations with particular reference to organisational change and organisational knowledge. These two sub-themes are further explored and analysed as follows: Organisational change: from paper to electronic records; initiation of organisational change; organisational change for achieving better performance; organisational change and information sharing. Organisational knowledge creation: for whom and by whom; organisational knowledge creation by practitioners for managers and using MIS to create organisational knowledge.

Organisational Change: From Paper to Electronic Records

The research interviewees in both Case Studies identified the implementation of the new MIS as an organisational change because among other changes it meant transfer of records from paper to electronic form and transfer of data entry of cases from administrative staff to social workers. Both of these were considered by the research participants in this study as major changes in organisational procedures. As a result practitioners and team managers had to change their practice and re-align themselves with the new business processes that the new MIS initiated. The findings of this study are consistent with other studies found in the literature about the implementation of MIS in social care organisations. In particular, Monnickendam and Eaglstein (1993), Riley and Smith (1997) White (2008b), and White et al., (2009) pointed out that organisational and design factors should be taken into account when a new MIS is introduced and that in every implementation there are several stakeholders who determine the processes and the results.

Initiation of Organisational Change

According to the findings in this study the decision to replace the old MIS in both organisations was made at the level of top management of the social care organisation under governmental direction. The findings also indicated that selecting which system to purchase was down to cost and whether the system responded to management needs rather responded to what practitioners considered to be useful. This would appear to bear out the point by Phillips and Yitzhak (1995) who argued that IS enhances the structural power of the organisation because IS are expensive to develop and use so the people who authorise the expenditure will serve their own needs and interests above those of anyone else. Harrington (1991) suggested that in management models such as a bureaucracy there is no established relationship between the organisational structure and technology but rather ICT is perceived as a tool for management use only.

Technological evolution, i.e. replacing old information systems with more advanced applications within a bureaucratic organisation, depends on the direction by the senior level of management and not on its employees' input. On the contrary the research findings established the condition where senior management and project teams decided and implemented their plans without entering into a dialogic relationship with their personnel. In contrast, when organisations are perceived as living organisms the structure is a result of the dialogic relationship between the workforce and technology (Capra, 2002). Harrington (1991) argued that when this is the case the workforce controls the technology because they own the data and information entered whereas management has only indirect control. These conditions were not identified in the research findings for this study.

It has been argued (Laudon and Laudon, 1996, Beynon-Davies, 2002) that a MIS is introduced with the overall goal of improving organisational efficiency and effectiveness by limiting administrative activities and saving time. The MIS also provides accessible information (provided that the required channels exist for information flow) and in general help employees at all levels being more organised in their work and decisions (Laudon and Laudon, 1996, Beynon-Davies, 2002). This research showed that in the two Case Studies organisational change was initiated by the government in order to secure up-to-date information and better quality of outcomes. It was not internally driven. Thus, both organisations had to amend their

organisational structure and culture in order to be compatible with governmental regulations. As a result of this top-down mandate it was difficult for staff to comprehend the organisational changes and to perceive them as beneficial for their practice. This was also confirmed in later evaluation studies of subsequent governmental initiatives, such as an evaluation of the ICS project for children services (Bell et al., 2009) three years later, after this research completed in 2006 and the Common Assessment Framework (Pithouse et al., 2004; Pithouse, 2006; Peckover et al., 2008a, 2008b; White et al., 2008; Bell et al., 2009) aimed at identifying how well the new systems assisted social care organisations to achieve their purpose of improving the quality of services, increasing accountability and reducing the costs of service delivery.

An additional important factor identified by this study's findings was the top-down approach followed to implement the new system, which led to the degree of practitioners' resistance to using the system. The literature review in Chapter 3 demonstrated that top-down policy implementation, which both central and local government used in various cases, did not facilitate its purpose (Gould, 1996a, Baldwin, 2000). Rather, it constrains the implementation because it does not involve all the possible stakeholders including service users and practitioners. When ICT is implemented without taking into consideration the needs of practitioners as end-users then it is bound to face resistance from them. This became apparent through the two Case Studies and although the utilisation of the MIS had just started at the time of interviewing, practitioners expressed doubts and reservations as to whether the system would assist them in the day-to-day running of the service. The research participants also expressed a negative attitude towards the organisation itself and the approach it followed to implement the new MIS. An ESRC discussion paper later written by Wastell et al., (2008) confirms that the difficulty is not about which system to use but rather which approach the organisation chooses to introduce it.

Organisational change for achieving better performance

This study also illustrated that team managers in their discussion of the organisation focused on the expected improvements in accountability and performance monitoring; whereas senior management shared perceptions of enhanced managerial processes and accuracy of data providing increased effectiveness of

service delivery. IT staff across both Case-studies expressed their perceptions of increased staff effectiveness and performance associated with the new system. It could be argued that the research participants with managing responsibilities expected that MIS would improve practitioners' performance and thus all aspects of the organisation's management will be improved. This is consistent with Gould (1996b) who also found that senior management were primarily interested in organisational control, effective resource management, and staff monitoring, whereas IT staff were interested in the system's administration (Gould, 1996b).

In this study it was found that MIS was used mainly for managerial purposes without taking the needs of front-line staff into account. Argyris (1990) asserted that most organisations create MIS, which are designed for single-loop learning, thus, as discussed earlier, suppressing double-loop learning, and resulting in the inability of the organisations to disseminate results, provide feedback and consequently be able to learn or create knowledge. Harris (2003) also suggested that MIS has been employed in social care organisations to reduce professional power with the use of a 'tick box culture', imposing further limits to practitioners' judgment and discretion, a sentiment that was also expressed by practitioners in this study. Further, more recent research by Bell et al., (2009) and Wastell et al., (2008) has also shown that the 'tick box culture' of various information systems has been problematic and cumbersome, thus creating difficulties in delivery of services and as a result practitioners were not able to fully utilize them. This could be explained as lack of strategic thinking of how to introduce an organisational change and how to embark personnel with it.

IT staff and senior managers in this study identified that the utilisation of the new MIS would improve practitioners' skills and thus increase their performance. It was expected that the organisation's performance and efficiency in delivering social care organisations outcomes would be improved. These findings confirm that social care organisations are driven by a 3E culture (effectiveness, efficiency and economy), embedded in every aspect of their work, which serves the governmental interests of value for money and better service outcomes (Langan, 1994, Le Grand, 1991). Yet, professional practice is perceived as a barrier to modernisation and the business orientation of social care organisations because professionals have the power to agree or disagree with policy implementation (Clarke et al., 1994, Baldwin, 2000, Harris, 2003). This could be a reason why practitioners in the two Case Studies were not

consulted in the first phase of the process but quite late when the systems were already purchased.

Organisational Change and Information Sharing

A feature attributed to the MIS in this study was its role in sharing information and facilitating communication both internally and externally. With the Electronic Social Care Record (ESCR) initiative and later on with the Information Sharing and Assessment (ISA) project as a key part of ECM it became important for social care organisations to be able to share information with external organisations, such as NHS or Mental Health Trusts, and to improve cooperation among professionals. The research participants in this study believed that this would create a substantial improvement in their inter-professional relationships with colleagues from external organisations as well as relationships within their organisation. Bell et al., (2009) also demonstrated that while the principle of sharing information with other organisations was an option practitioners still were uncertain whether this was going to be achieved. The difficulty identified by Bell et al., (2009) was the incompatibility of information systems among organisations, a finding this research also illustrated as the research participants were quite cautious about this issue.

Organisational knowledge creation: for whom and by whom

The practitioners interviewed in this study could not identify any possible ways where the MIS could produce organisational knowledge. In contrast, the other research participants could foresee that the new system, if used correctly, could inform practice and therefore improve services. It has been argued in the literature review in Chapter 3 that the main point of organisational knowledge creation is who controls that knowledge and for whose benefit (Lawton et al., 1991). In the Case Studies researched it was apparent that the research participants, especially practitioners, were not exactly sure what they would or could do with all the information available. Handzic (2001) has argued that this is also linked to having too much information as this affects individual's decisions. Information overload was interpreted by practitioners in this study as a constraint because the new MIS was not properly linked with the needs of each practitioner as an individual decision-maker.

Organisational knowledge creation by practitioners for managers

The senior managers and IT staff in this study were primarily interested in employing MIS to manage services and resources. They were most concerned with the accuracy of records because this would ensure that accurate data would be returned to government and consequently secure funding. In Case-study B senior managers and IT staff stated that knowledge is a bottom-up process and that it depends on data quality. In other fields, from the military to health services, knowledge is recognised as a strategic factor for the improvement of an organisation in order to establish coherent goals and achieve its purposes (Nonaka, 1998). However, the research findings of this study indicated that social care organisations were at an early stage regarding creation and sharing of organisational knowledge because practitioners and team managers were uncertain about the use of knowledge derived from information systems, whereas senior management was concerned with accuracy of data.

The IT research participants in both Case-studies believed that reports could be produced by the MIS but it was up to practitioners how they would use them in order to produce organisational knowledge. According to the IT staff, practitioners who are responsible for entering and ensuring the data quality should also know how to use reports produced by the MIS. According to Nonaka and Takeuchi (1995) knowledge is created only by individuals and an organisation cannot create knowledge without them. The authors also argued that: “The organisation supports creative individuals or provides contexts for them to create knowledge” (Nonaka & Takeuchi, 1995:59). Therefore, it could be argued that for social workers to translate their tacit knowledge into explicit knowledge in a format, which can be shared within the organisation, formal and informal structures should be established, which will exploit knowledge and transfer it to organisational memory as the study’s findings have shown.

There was an important difference in terms of organisational knowledge creation in the Case-studies researched. In Case-study A, IT staff thought that although the system would record information input by practitioners it could not necessarily produce knowledge because it was directed by a top-down approach. However, IT staff in Case-study B thought that the system could produce reports, which would assist in building organisational knowledge because they viewed

knowledge as a bottom-up phenomenon. This difference was explained in the data analysis in Chapter 7 by the deeper organisational differences between the two Case Studies related to the culture of the organisations and the background of the staff. Various authors have developed different approaches to understanding how organisational knowledge is created (Nonaka & Takeuchi, 1995, Inkpen, 1996). They all however, agree that an established technology infrastructure promotes knowledge creation because although individuals hold tacit knowledge this must be translated to explicit knowledge, which is codified and then transferable (Nonaka & Takeuchi, 1995). For social care organisations the implementation of MIS is considered a first step towards creating organisational knowledge but to accomplish this goal it is essential that all stakeholders interact and offer their professional expertise which clearly illustrated the "I am my position" syndrome identified by Senge (1990).

Using MIS to create organisational knowledge

The research groups of practitioners and team managers also expressed their reservations about the impact of MIS on the creation of organisational knowledge. According to them there were features in social care organisations, which illustrated that social work practice, could be managed in a learning organisation environment. These features included team meetings, supervision and informal networks. These research findings are consistent with Eraut's concept of implicit learning that is 'the acquisition of knowledge independently of conscious attempts to learn and the absence of explicit knowledge about what was learned' (Reber, 1993 quoted by Eraut 2000:12). Informal networks were used among practitioners in this study for sharing thoughts and ideas about cases and consequently used as a mode for learning.

Shaw (2010) suggested social workers are 'knowledge workers' because they can generate social work knowledge via their practice and research. This is an important claim that agrees with the findings in this study about ownership of data entered by social workers into MIS and the use of it in a constructive and beneficial way for both themselves and the organisation. Practitioners in this study, however, did not seem able to appreciate the power of the knowledge and its utilisation in service delivery. This could be explained as an organisational weakness to introduce all stakeholders into MIS benefits. Hudson (2004:79) claimed that: "Most knowledge, however, is highly localized within a system, especially tacit knowledge, and

improvements in efficiency and effectiveness require this localized knowledge to be joined up both between and within organizations". In this respect it is suggested here that practitioners could have been more receptive to the MIS and its products and able to utilise it if they had been involved in the procedure of joining their practice knowledge in building organisational knowledge through the MIS.

Schoech (2002) and Hudson (2004) argue that organisations such as social care organisations that are structured on a bureaucratic hierarchy rather on an IT network structure cannot adapt to computerisation in their daily activities as easily as organisations which have adopted the latter form of structure. Thus, it could be argued that the nature of the structural relationship between the organisation and MIS affects how people within the organisation perceive the MIS contribution to the organisations' operation and this could explain why research participants/practitioners failed to understand the MIS benefits. Schoech (2002) suggested that if social care organisations are meant to become learning organisations or intelligent organisations they must construct a knowledge infrastructure, which will allow informal processes as mentioned previously to initiate their transformation into intelligent organisations.

Finally, the research findings in this study showed that although the use of MIS in storing and disseminating knowledge entails dangers and ambiguity as to how it is interpreted or utilised it is rather difficult to avoid MIS use. Pithouse et al., (2009) state that the use of IS in social care organisations might produce information and knowledge but this knowledge is left to be freely interpreted by its receiver whether this is the service user, the manager, the media or the politician. In the literature review in Chapter 3 it was demonstrated that ICT is a means to an end rather than the end itself. If it is controlled by its end-users in a bottom-up approach of utilisation then the knowledge may be utilised properly (Argyris, 1990; Capra, 2000). If the MIS are used only for controlling staff and managing information, then they are likely to create problems. Therefore it could be argued that the ownership of the data performs a crucial role in the development from data to information and finally knowledge.

8.4 Social Work Practice and MIS

This final section explores the effects that MIS implementation had on social work practice and on social workers themselves, as perceived by the research participants in this study. The theme is explored through discussion of the sub-themes

of social workers' deskilling, professional relationships with service users, professional values, control over professionals' practice and recording.

Social workers' deskilling

Both practitioners and team managers expressed their concerns regarding the deskilling of social work practitioners. They perceived the MIS as a management information tool and could not identify how the system could operate as a practice tool for them. They were concerned that social workers would face deskilling as they would have to carry out increased administrative tasks and by implication less social work practice. The major issues raised in the earlier literature review which related to social work were about the deskilling and de-professionalisation of social work as a result of using more ICT tools in everyday practice (Gould, 1996b, Harris, 2003). Deskilling or upskilling is one of the effects MIS can have on its users according to Heeks and Bhatnagar (2000). The use of MIS can decrease or increase the user's skills accordingly. If the users perceive the system only as a management tool for monitoring and controlling their work then it seems possible that they may lose some of their skills in recording for example their cases, their observations and interventions.

Professional relationships with service users

Another major concern raised by the interviewees about MIS impact on social work practice was the expected changes to social work practice. They stated that they believed their practice would move towards a conflict between the computer and the client. One aim of the computerisation of practice was to replace the bureaucratic procedures social workers had to previously deal with in order to help their clients. However, as it was demonstrated by other studies too, social workers felt they were becoming alienated because the job became even more bureaucratic with the use of IT (Shaw et al., 2009, White et al., 2009) There is always the danger of being alienated from using IT tools if social workers feel that IT constrains their work with their clients. Most of the practitioners in this study expressed the concern that keeping up-to-date records and using computers in general would result in neglecting their professional relationships with their clients. They also thought that social work would become an administrative profession and professional values and principles would be threatened. Mithran (2006) argued that the profession has become more focused on

paperwork and keeping records rather than on clients. They were clear that that the excessive use of computers and MIS was not the reason that they chose to become social workers, consistent with later findings by Wastell et al., (2008).

Professional values

The research participants in this study believed that the organisational change initiated by the introduction of a new MIS contradicted professional values. They made statements characterising the organisation as “faceless” because in their view the control and monitoring of staff was considered more important than assisting staff to achieve better service outcomes. Carrillio (2005) argues that MIS fail to become a communication medium because the focus is on control and decision-making processes rather than on empowerment of end-users. These findings are consistent with those of White et al., (2008) and Bell et al., (2009) in their studies of the ICS. The MIS implementation also transformed practice from being ‘libertarian’ as one SM put it in this study, meaning that social workers were progressing from being less controlled in practicing social work to more business and technology driven.

Control over professionals’ practice and recording

According to Garret (2005) the computer-based culture promoted with the introduction of the Electronic Social Care Record and the E-Government agenda requires practitioners’ input, which secures accuracy of information and accountability of social workers’ actions. Moving towards a business model of social care, practitioners are obliged to follow processes, which ensure that resources are spent effectively and service users receive an adequate level and quality of services. These changes require that the nature of practice adjusts to become more structured. Various commentators (Vickers, 1997, Mithran, 2006) have pointed out that the use of IS transforms social care organisations from professionalised bureaucracies to centrally controlled administrative activities. Research findings by Vickers (1997) and Mithran (2006) have illustrated that social work is more bureaucratic than ever before and is now technology-driven rather than needs-driven. Practitioners and team managers in this study also believed that the demands of recording within the new MIS were in opposition to social work practice requirements.

Research participants in this study also identified difficulties regarding record keeping because of the new MIS. Riley and Smith (1997) concluded that resistance to MIS (as a result of staff not being sufficiently involved) leads social workers away from keeping case records on computerised systems and encourages them to retain paper records. It could be argued that there exist interlinked factors between practitioners' participation in MIS design and implementation and recording cases. A key difficulty identified in this study was the technical competence of practitioners. This competence could be achieved by continuous and up-to-date training but the social workers in the study received rather fragmented ICT training whenever the need arises. This led practitioners to being confused and refusing to work with MIS. As Gould (2000) explained social workers in order to be technically competent they need to receive training on ICT as an integral part of their practice, and not as a technical form of it.

There was a broad recognition by the research participants in this study that the system's outcomes for planning and practice would improve organisational effectiveness in responding to clients' needs in the long term. Team managers in particular, believed that practitioners would be more informed but they needed to own their data and record it accurately. To them the implementation of the new MIS, which imposed the recording of every single action, seemed to be an additional tool for controlling practitioners. Social work practitioners in this study were convinced that MIS could not be anything other than a tool for gathering and managing information, providing accurate data returns for the Department of Health and ultimately a means for managers to check up on them. Heeks and Bhatnagar (2000) refer to the increase or reduction of employees' autonomy after MIS has been implemented. MIS can be designed either to enhance autonomy because employees acquire more responsibilities for planning and controlling their own work or they can be designed to control personnel's everyday work. Control over social workers' practice and demands for greater accountability were emphasised in the 1990s with the introduction of community care and quasi-markets and apparently continues with the governmental initiatives of E-Government of the next decade (Harris, 2003).

This study also revealed that social workers perceived changes in the nature of social work, particularly in terms of delivery of service, resulting from the implementation of the system from client-driven to computer-driven. This is

consistent with Mithran (2006a) and Wastells et al., (2008) in which social work practitioners reported that social work has become more bureaucratic than ever and less client-focused. Information technology and its tools have been approached by practitioners as constraints to their work with clients rather than as a tool for improving practice and services (Harris, 2003).

8.5 Conclusions

This Chapter discussed themes derived from an integration of the research findings and related studies. The key concepts resulting from this analysis included the necessity for all staff to participate equally in designing and implementing a new MIS with greater emphasis on the participation of front-line staff. The mode of organisational structure and the management model in use affect how MIS is implemented and how front-line staff perceived its implementation. Social work practice changes in nature and becomes more structured with the use of MIS; however, there is evidence from the research and from the literature review that practice can be informed by MIS utilising the various contexts within which practitioners learn in order to identify opportunities for organisational learning and organisational knowledge creation.

Social care organisations are required to develop new strategies to allow exploitation of their knowledge resources and to transform themselves into effective producers of knowledge. MIS in particular could contribute towards this goal by providing the technological infrastructure needed. That would promote opportunities for participation in developing new skills for exchange of expertise as well as offer possibilities for individual and organisational learning and consequently for knowledge production. ICT includes endless opportunities for innovative practice, for example virtual environments, such as communities of practice.

This Chapter's aim to link the research findings with relevant literature in the field has been a challenging quest. The duration of the project has created the need to review literature prior to the study's initiation but also literature which was developed concurrent with the project and especially at its latest stages when it was close to completion (2007, 2008, 2009 and 2010). This was a challenging task as the researcher had to stay up-to-date. A more recent bibliography has been added to the

literature review Chapters 2 and 3 and the concluding Chapters 8 and 9. This offered the unusual opportunity to revisit the early research findings in this study in light of later studies. This dynamic relationship of bringing together in one piece of work the past, the present and the future has been a substantial experience both in research and personal development.

An additional factor, which is linked to the literature review, is the breadth of different realms needed to be covered. Apart from social work practice and the state of social care organisations, social policy, organisational change, management, organisational knowledge, knowledge management were also included to name but a few. The latter areas presented greater difficulty for the researcher to stay up-to-date with their developments.

The next Chapter integrates the key points raised based on the connections made between the research findings and the literature into two models for MIS implementation and organisational knowledge creation. It also includes the study's contribution to knowledge, its limitations and future research ideas.

CHAPTER 9: A Practitioner-Centric Model for MIS Implementation & the Creation of Organisational Knowledge

9.1 Introduction

The aim of this thesis was to identify the role of social work practitioners in MIS selection and implementation and to establish the links between the utilisation of MIS with the creation of organisational knowledge in social care organisations. The thesis endeavours to increase understanding of the process of implementation and to capture the meaning and awareness of all stakeholders.

Research Sub-questions 2 and 3 asked how MIS utilisation affects the social care organisations and how social care staff experienced the MIS implementation. The data analysis provided the experiences and perceptions of social care staff during MIS implementation, also shedding light on the effects of utilisation of MIS on social care organisation and social work practice. Team managers and senior managers perceived MIS utilisation as providing improvement in information sharing and knowledge generation demonstrated through improved cooperation and communication both internally and externally for the organisation. In addition, improvement in organisational processes was perceived in terms of increased accuracy of data, accountability, and monitoring of staff among team managers and senior management, as well as participants across the Cases who noted the increased accuracy and effectiveness of data.

Research Sub-questions 3 and 4 were formulated to ascertain MIS influence on the organisation and what opportunities are introduced by MIS for organisational knowledge and learning. Organisational change resulting from implementation of a new MIS occurred in the business processes and in the organisations' culture as well in both organisations studied. Although practitioners frequently seemed to recognise the value of participation in the selection and development of MIS in this study, they also commented on the lack of time in order to participate due to workload demands. The importance of practitioners' participation in the selection and development of the

MIS was noted by the research participants across both Case Studies and professional roles.

The research findings explained that although practitioners' participation was acknowledged as an important factor, it was hindered by structural constraints such as lack of communication and limited access to management processes. Secondly, whilst there was an apparent willingness on the part of front-line staff to participate more in decision-making and to offer their expertise, the evidence suggested that their professional experience remained under-utilised. Furthermore, the findings indicated considerable reservations from the practitioners' side as to whether the MIS could enhance the creation of organisational knowledge within the organisation.

This Chapter elaborates on the integration of the research findings with the literature review by proposing two models based on prior knowledge extracted from the literature review but mainly based on the research findings' analysis. The models suggest changes in three main areas based on the research participants' perceptions of what constrains social work practice and what works after the MIS implementation. They cover issues related to organisation, management information systems and social work practice. The first part discusses changes in organisational culture and structure and ideas about producing and capturing organisational knowledge. The second part refers to management and includes social workers' training and learning, and their links with supervision, building communication channels and supporting participative decision-making. The final part of social work practice discusses the use MIS in facilitating the role of practitioners' practice in policy implementation and management of the organisation. Thus, the models assimilate the research participants' ideas with current knowledge and propose participative management in MIS implementation in social care organisations and the creation of organisational knowledge.

9.2 Theme 1 - Organisation

Social care organisations have been characterised as a field where management models and tools developed for private companies are implemented in order to achieve quality of outcomes and cost-effective use of resources (James, 1994, Harris, 2003). Usually social care organisations change their organisational culture and

structure to accommodate the demands of any new model. For instance, when new public management was introduced with the NHS and Community Care Act of 1990, the bureaucratic structure and scientific management approach to management that had existed until then changed towards a more flexible model of management based on managerial tools for controlling social services expenditures through upgrading managerial and economic concerns and external quality management (Langan and Clarke, 1994). The organisational structure was also transformed from being one based on professional discretion to one that showed increasing managerial control and monitoring over professional practice (Baldwin, 2000, Harris, 2003). Additionally, the fact that social care organisations were perceived as carriers and spenders of public money and not as living organisms with different needs did not offer opportunities for development at a more decentralised level.

The implementation of the new MIS was characterised as a major cultural shift because it initiated changes by introducing new business processes for undertaking professional social work tasks. However, a real culture shift would be one which transfers the point of interest from the 3Es of efficiency, effectiveness and economy to what service users really need. Management models and methods, which advocate better and more efficient use of resources, must be enhanced with approaches that involve front-line staff in organisational procedures. Social care organisations need to create a flexible but secure organisational structure; a structure that is not based on borrowed hierarchies and does not have to try to adjust whenever a new policy is implemented. This structure needs to be flexible enough to accommodate changes, not as a burden but as a new perspective of improving. This kind of structure could be achieved with the use of horizontal communication between personnel and management with learning opportunities for staff and by capturing and disseminating organisational knowledge. Various scholars have urged before and after this study took place for developing principles of a learning organisation in social care organisations and in knowledge management in particular (Riley and Smith, 1997, Gould, 2000, Schoech et al., 2002, (Wastell et al., 2008, White, 2008a, 2008b, White et al., 2009, Shaw et al. 2009a, 2009b, 2009c, Shaw, 2010).

A scientific approach can generate knowledge production, can also suggest ways in which this can be incorporated into practice, and can monitor it in such a way as to highlight further areas that would merit investigation. In social work practice there is

a continuous need for different kinds of knowledge. In a strict scientific rationalism it is thought that the relationship between practice and knowledge is such that scientific research produces knowledge and that practice utilises this knowledge. More specifically, social work practice requires knowledge creation, which is based on research findings but is also informed by professional experience. As organisations evolve in order to respond to more complicated client's needs they also need to incorporate more advanced methods for responding to those needs. Information management and dissemination is the first step towards this goal. The second step is to translate information into knowledge and new skills for social work practice. Organisational knowledge refers not only to managing information but also to developing and supporting good practices (Tsoukas and Vladimirou, 2001). It also refers to offering individuals the capacity to exercise judgement (ibid. 2001:976).

Social work functions most often within groups and committees. The service users are participating in the process through discussions with the practitioner planning the kind of intervention that is appropriate for them. This means that social workers do not guide the process solely with their own decisions, for the process is carried forward together with the service user. In this kind of situation social workers must be able to observe, reflect on their observations together with partners or clients, and contribute on the basis of those reflections. Because of the multi-dimensional context i.e. social problems, psychological and health problems there is always the need to use skills and tools from other scientific disciplines in order for social workers to deliver services (Payne, 1991). Thus, knowledge for social work is also developed by linking together the understanding of different disciplines into social work skills.

It could be argued that social work knowledge can be created in three main ways. Firstly, social workers observe social conditions and their clients' skills in coping with these conditions (Schön, 1983). These observations are a knowledge-based frame of reference for social workers, which are continuously reviewed and renewed. Learning by experience offers possibilities for discovering new knowledge and skills. There is always the need to organise these observations so the use of a MIS could provide a secure and flexible environment for recording, managing and retrieving information. As observations need organising in order to draw conclusions there has to be an established link with legislation, theoretical knowledge and research

knowledge (Schoech et al., 2002). Research results and knowledge produced by practical experience are additional points, which can be utilised with the use of MIS.

Knowledge is also created by designing interventions and evaluating them. Social work interventions are not planned in a vacuum in front of a PC but with the client in a neutral environment where both participants – client and social worker – can make suggestions, and plan and reflect upon their thoughts on how to proceed. Knowledge is generated through designing interventions because the practitioner not only uses established techniques but also creates new methods and tools usually deriving from their professional experience linked with research results and theoretical knowledge. It is essential to monitor and evaluate the whole process and the intervention so for this reason monitoring and evaluation is one source of knowledge production, which the practitioner employs. He or she can create his/her own techniques in order to address the questions of outcome or impact. So, professional experience is again used to inform the evaluation process and produce new practice knowledge (Shaw, 1996).

However, when social workers construct or create new kinds of knowledge derived from their practice experience the biggest challenge they face is how to capture that knowledge and disseminate it within the rest of the organisation and in the external environment. Ideally the solution exists within the utilisation of advanced ICT systems like for example, MIS, Decision Support Systems, or Expert Support Systems. The utilisation of information systems has offered the business world the opportunity to access and incorporate knowledge of individuals into organisational environments (Schoech et al., 2002). ICT systems could also assist in transforming social care organisations from providing services according to resources available to the point where it will provide services according to their expertise and client demands. For instance, information systems could draw together theoretical knowledge of social work and policy as well as professional's skills and experiences in order to inform practice and decision-making.

Sharing knowledge and skills with the external environment again presumes the use of advanced technological solutions. Social workers are able to network with colleagues across disciplines. The creation of communities of practice (Wenger and Snyder, 2001) where professionals find a space to exchange ideas, good practices, find answers, establish links with academics and research organisations is not difficult

to achieve. Communities of practice are used extensively in multinational corporations where even professionals based in different countries can communicate and exchange information, practice and knowledge. Additionally, as social workers work in a world where general approaches and traditional scientific disciplines intersect there is the profound need to cross narrow organisational boundaries. There is a huge amount of research knowledge, which remains unexploited because of the limitations in reaching social workers on the ground. Through virtual environments, for example, there are endless possibilities to link practice experience with research knowledge to create new knowledge structures and content, new concepts, new understandings and new methods. As Gould (2000) has argued, opportunities for sharing professional experiences can be exploited within inter-team meetings and joint working with joint accountability and ownership of work. Moreover, Schoech et al., (2002) demonstrated that the exchange of information and knowledge among organisations empowers the organisation itself, its staff and clients.

9.3 Theme 2 - Management

This section discusses management with specific reference to training for social workers, learning and supervision. It also suggests the building of feedback loops for consultation and decision-making so that participative decision-making will be facilitated. Undertaking formal training is a prerequisite for social workers in order to be registered with the General Social Care Council. Considerable formal in-service training is offered within social care organisations and they are committed to offer opportunities and flexibility to their staff in order to assist them in attending training sessions. However, there is no evidence that knowledge obtained through this kind of training is shared within the organisation or whether it is translated into learning (Seden, 2003). The practitioners from both Case Studies stated that learning also occurs within informal networks. It could be argued that when any organization takes on new staff there is an implicit understanding on both sides that the work experience will contribute to the individual’s professional development through varied practice opportunities.

The positive outcome for the organization is that a staff group that is always in the process of developing new and improved skills offers a much better service and this could lead to improved service outcomes. It is therefore essential for

organisations to develop a certain degree of understanding of the practical implications of strengthening informal learning for developing the individual and collective capabilities of social workers. They could also adopt informal learning as an official training mode because according to Senge (1990:23) “the most powerful learning comes from experience”. This learning also is based on understanding personalities, interpersonal skills, knowledge and learning orientation of managers. The role of managers in developing and organising training and learning is important as they are the team leaders and are aware of their teams’ learning needs. Gould (2000:590) argues that the social care organisations have the capacity to become learning organisations because they already have teams which act as ‘a critical context for learning’.

Building feedback loops among managers and subordinates in every decision-making activity is considered to be an issue on which social care organisations will work in the near future. This study of the MIS implementation offered enough evidence on how the involvement of practitioners could have been beneficial for the organisation itself. Giving opportunities for participation or consultation is not sufficient unless practitioners are aware that their opinions are heard and appreciated. They do need to be informed on how their contribution was taken into consideration because that makes them feel valued. Consultations with staff in order to establish decision-making processes based on participative management are a kind of approach which could help on actively involving practitioners in various organisational processes.

9.4 Theme 3 - Social Work Practice

Ultimately it is essential to discuss how MIS could contribute to social work practice in a positive and constructive way. It has been mentioned that the effective utilisation of MIS in social care organisations depends on staff’s ability to recognise it as a practice tool for information collection and management and not only as a controlling tool (Schoech et al., 2002). Additionally, social work practitioners cannot be separated from the management of the organisations they work for or from the policy development process. That the social worker’s role is very important in both of these procedures was highlighted in the research findings. Thus, the main concern

could be how to enhance this role in the future and how to achieve better outcomes for social work practice and for service delivery.

The delivery and management of social services in terms of the relationship between the social workers and their clients as well as their relation to the organisation determines, in part, social work's development. Social care organisations are required to develop a new management infrastructure for their knowledge resources and to transform themselves into sites that can generate effective knowledge production (Schoech et al., 2002, Shaw, 2010). MIS could contribute towards this goal by providing a context for organisational learning and knowledge. This context would promote free participation in developing new skills and expertise, and offer possibilities for individual and organisational learning as well as knowledge production.

Organisations are increasingly concerned with building strategies for effectively sharing information gathered by individual staff members, and this concern has led to interesting new work in software design (Carrilio, 2005). For social care organisations, such work has the potential to improve service delivery by bringing together relevant information that is spread across a social care organisation's current and former staff and even beyond that (Schoech et al., 2002). This is important because there are many situations in which it is useful for social care organisations to understand the interconnectedness and patterns of interaction among people and organisations over time.

For instance, let us suppose that over a period of two years five different social work practitioners each refers a different service user to the same social work team in a social care organisation and all of those five service users find themselves in a similar case of conflict with the organisation's staff. The fragments of experience of each individual practitioner could, if brought together, combine to create a more holistic understanding of the situation. This in turn could lead to more effective interventions. These fragments may come together in informal staff discussions, but this relies on chance. Formal procedures can be introduced to try to bring information together (e.g., check the surnames of all new service users against the case files to identify service users of the same surname, and periodically review the set of referrals to each social work team) but these will be time-consuming and therefore expensive unless a management information system has been specifically set up to support them.

Last but not least, social care organisations could also focus on service users' involvement. Although there is established legislation (DoH, 1989, 1998, 2005) on involving service users and carers in service planning, evaluation and policy development there is a still a lot to be accomplished to ensure that they are equally represented as citizens (McDonald, 1999, Beresford, 2000, Carr, 2004). Whilst social care organisations cannot involve their staff in executive decisions and organisational procedures, it is not expected that they will be able to engage with service users in a different kind of relationship either. Carr (2004) further reported that organisational culture is a key in both creating the opportunities and facilitating participation of service users. Service users' participation requires a certain amount of resources to be spent on planning but more importantly it requires the political will to transfer power from the organisations to service users. Service users' involvement could offer better outcomes on the delivery of services as the people meant to use them will have helped to design them.

Concluding this section, it could be argued that social work practice is connected with both policy implementation and organisational management. Social work procedures such as intervention and evaluation are connected with organisational purposes because they contribute substantially in organisational outcomes for service users. Participative management, which embraces both front-line staff and service users in organisational procedures, could promote less resistance to new policies, staff engagement and support of organisational goals and finally service outcomes, which reflect the services' responsiveness to service users' needs. The employment of MIS towards this end creates the prerequisites for this kind of positive development and facilitates people's work and their activities.

ICT use in social work and the consequences for social work practice have been a topic of debate for many years in both Europe and USA as the preceding literature review demonstrated. However, the role of the practitioner as a recipient of organisational changes due to ICT development in social care organisations has not been adequately addressed and discussed so far. This thesis considered practitioners' contribution to be substantial in both MIS implementation and the creation of organisation knowledge. Thus, it explored the issues surrounding practitioners' participation in MIS development and implementation in order to illustrate that its absence creates further obstacles for service delivery and organisational development.

It was also demonstrated that the utilization of individual and group professional experience through the use of MIS enhances organisational knowledge and provides better prospects for social work practice development and quality outcomes. The following section will visualise the models based on the themes and ideas discussed previously.

9.5 A Practitioner-Centric Model for MIS Implementation and the Creation of Organisational Knowledge

A Report of a joint study by the National Audit Office and the Audit Commission on Department of Health: National Programme for IT in the NHS raised issues about overspending and delays in implementing the new system which was expected to link nearly 30,000 GPs to nearly 300 hospitals by 2012. MP Edward Leigh, the chairman of the Commons Public Accounts Committee, said the report was "worrying" and the programme "must not be allowed to go the way of so many other ill-fated governmental IT projects". He added: "If this project is to succeed, it not only has to be delivered on time and to budget, but also win the hearts and minds of the staff who work daily in the NHS. This is not happening at the moment. Many staff, including GPs are alarmed and dispirited by having the new systems imposed by diktat from above" (quoted in Batty, 2006).

The above statement served as a confirmation of the thesis' main construct that system end-users cannot feel engaged or motivated to use a new system when it is implemented without their participation. Although it was often said that there was a profound failure in implementing MIS, especially in the public sector, there was limited reference to the causes of that failure from a human perspective. Technical difficulties could delay MIS implementation but they could also be overcome because they depended upon technical staff's abilities and access to precise data. However, difficulties which depend on system-users cannot be overcome unless those users were taken into consideration from the early stages of the system's development. For instance, practice of professionals working in social care organisations such as social workers or doctors is determined by a strong ethics and value base in order to protect their clients from neglect or malpractice. If that value base was not also considered as an important factor in determining the form and content of MIS components then professionals cannot accept or perceive that system as part of their practice. Secondly,

when the knowledge they hold on what can improve the service they work for remains underutilised then the system is simply based on technical knowledge and could not respond to their needs.

This thesis indicated that if practitioners were involved from the beginning in the process of acquiring a new MIS for social care organisations there would have been less resistance when the system was implemented. Therefore, based on the research evidence collected and analysed for this thesis, it was argued that the human factors in MIS implementation were more important than technical factors and that there was an increased need to create a context for accommodating the human perspective. The practitioners taking part in this research felt that the system served their manager's needs rather than their own because they could understand that this was what the system was designed to do. The limited participation they had to contribute their information and articulate their recording needs was not enough to ensure that those requirements were met. Their professional experience about what could improve their work remained underutilised because technical knowledge was considered more important than practice experience in developing a MIS to be used by social workers.

The following diagrams illustrate and exemplify the points made previously in this Chapter about participative management in MIS implementation and in capturing organisational knowledge. Both diagrams have a common characteristic in that the practitioners are at the centre of the action, launching and ending the process. The first diagram (Figure 9.1), entitled "A Practitioner Centric Model for MIS Implementation in Social Care Organisations", and consists of three main phases: MIS design and implementation, practitioners' participation, and transforming process.

In the first phase, that of MIS design and implementation, there are two components. On the one hand, it is organisation (which includes all the organisational factors that may determine the information requirements such as organisational structure and culture) and management. On the other hand, there is the technical knowledge in MIS offered either internally or externally by the organisation to respond to organisational requirements. Technical knowledge and know-how, however, require both individual and organizational learning because it is usually the case that technology is transferred to the organization but not the know-how that is required for effective use of the technology. There are two ways to gain technical

knowledge: learning-by-using and learning-by-doing (Schön, 1983). For complex technologies, users develop an awareness of the strengths and weaknesses of the technology by using the system, while organizations learn about how best to put technology to effective use by gradually modifying (doing) the technology to suit their needs.

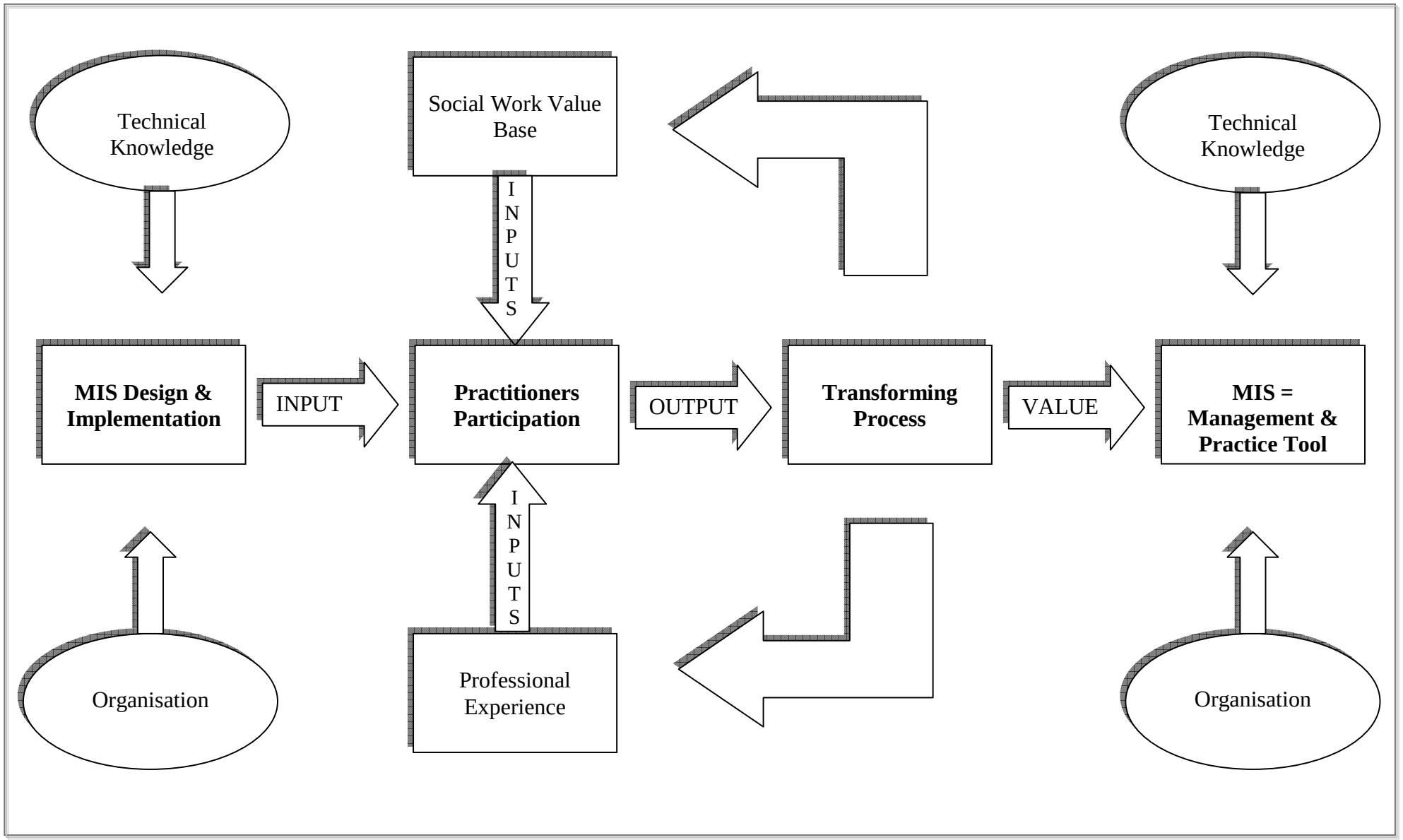

Figure 9.1 A Practitioner Centric Model for MIS Implementation

These two components produce certain inputs, mainly suggestions about how the new system is going to be designed and implemented. The second phase starts when practitioners enter into the process by bringing their professional experience, which includes their needs from the proposed system. Practitioners' information requirements are also determined by social work's value base. The value base provides the professional context within which practitioners think and act when working with service users. From the value base practitioners will seek to find answers about what constitutes good practice or not. They will also develop their arguments about protecting and preserving the anonymity and confidentiality of their clients. Any concerns they might develop regarding the system will be originated by those two factors i.e. professional experience and professional value base.

Practitioners' concerns and requirements in the transforming process are dealt with mainly by referring to the transformation of the MIS from a technical tool to a MIS, which sufficiently incorporates the organisation's information needs as well as the end-users needs. Feedback channels ensure that any concerns raised are discussed and resolved by offering the space to individuals to review their contribution. In addition, any errors occurring are more easily identified by confirming what individuals have stated. Feedback occurs through the MIS implementation process as knowledge is gained when the particular technology or software development is perfected and better understood. Practitioners may become familiar with using the particular hardware or user interface and hence become more confident and less fearful of new technology.

It could also be mentioned that social work teams' needs regarding the MIS implementation are represented through individual practitioners' participation. Different teams within a service have different information or recording needs and these must be addressed separately for each team so that the final product will serve a broad variety of stakeholders. At the end of the process technical knowledge and organisation interact to co-lead the final outcome. The expected outcome of this process is to develop a value for both practitioners and the organisation of being able to perceive the system as a practice as well as a management tool.

In this thesis it was also claimed that it is important for social care organisations to be able to capture professional experience and translate it into social work practice knowledge and, furthermore, to organisational knowledge. This conclusion was

reached through the research study by appreciating the value of social workers professional knowledge and the lack of its adequate utilization by social care organisations. The literature review also illustrated the importance of that knowledge for the improvement of services and their outcomes for service users. Thus, a model for capturing practitioners' tacit knowledge and translating it into organisational knowledge is proposed below. This model depends on a network of interrelationships to manage the collection, use, distribution, and retention of organizational knowledge and to strengthen relationships with other agencies in social care and professional organisations. The process described in Figure 9.2 starts and finishes with practitioners.

First, cases are allocated to practitioners via MIS. Practitioners make contact with the service user to assess their situation and the process of knowledge creation begins. The whole time practitioners record their contacts with the specific user in the MIS so communication and transfer of data to the top of management is ensured. Thinking about previously similar cases and making observations are the first step and one form of tacit knowledge (Nonaka & Takeuchi, 1995), which the practitioner uses in order to understand and appreciate each case. Then, with the client's consultation the second step starts. This involves planning the appropriate intervention. In this stage explicit knowledge (Nonaka & Takeuchi, 1995) enters the process in the form of legislation and organizational rules and regulations. Organisational procedures and documentation influence the approach the practitioner will follow to plan and implement their intervention. The next step, that of supervision, has an influence from the allocation of the case but this model emphasises its role as a factor in merging the explicit and tacit knowledge by offering to the practitioner the advantage of reflection and analysis. Reflection and analysis in this stage is important in order firstly, to establish whether the planned intervention is the most appropriate and effective, how outcomes will be measured and, secondly, in creating the prerequisites for sharing and exchanging information and ideas.

At this point formal training, which represents explicit knowledge, affects how practitioners act as they will make use of any knowledge or skills they have gained. It is also possible that training taking place at the intervention phase will positively influence the practitioner and his/her actions. Knowledge creation starts to take form as the cycle gets closer to the end. Practitioners have renewed their skills and

expanded their horizons by incorporating new tacit and explicit knowledge. This has been accomplished mostly by working on the case, talking to their client, to their team manager and/or supervisor and to colleagues.

Additionally, a well-informed practitioner will also attempt to seek research evidence via on-line databases or other sorts of publications in order to identify good practice with possible similarities with what he/she is working on. Possibilities of dissemination of their own good practice and working knowledge can also be achieved through co-ordinated databases, groupware systems, intranets and internet. Dissemination is a form of communication, or a flow of information from a source. Dissemination is an active concept, where the information is tailored and targeted for an intended and identified audience. Developing this model social care organisations can hope that these tools will retain knowledge within the organisation and also that this will encourage learning and enable communities of practice to thrive across inter-organisational boundaries.

Finally, this model initiates the process of knowledge creation based on the fundamental process of social work practice. This is a process which has been employed for years but, in the context of introducing a new MIS, its importance for creating and disseminating social work practice knowledge has not been fully realised so far. However, it is this process which generates endless opportunities for learning and sharing knowledge via what each individual practitioner has learned through working with his/her client.

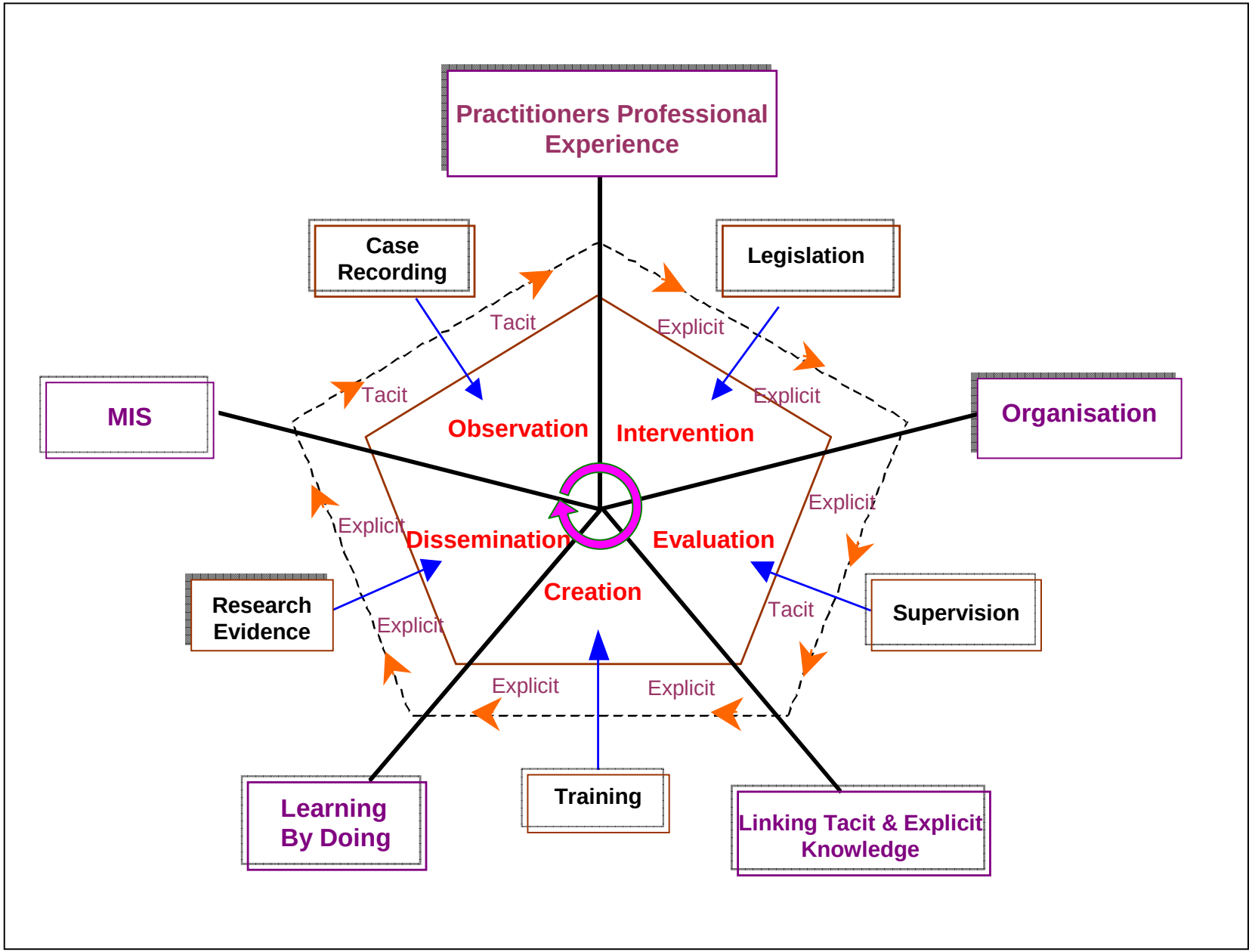

Figure 9.2 A Practitioner Centric Model towards the Creation of Organisational Knowledge

9.6 Contribution to knowledge

Given the passage of time the results from this thesis have contributed to an increased understanding of the way that MIS implementation has influenced social care organizations in England. As there is only a small number of studies dealing with the actual use of MIS in social care organisations it was considered important to explore how MIS was implemented and how the end-users i.e. social work practitioners perceived that implementation in two social care organizations. In addition, as there is an even smaller number of studies in the literature dealing with social work practitioners' participation in MIS design and implementation, and the creation of organisational knowledge in social care organisations this study's original contribution to knowledge lies in the better understanding of the links between practitioners' participation in MIS design and implementation, practitioners' professional knowledge and the creation of organisational knowledge. A fundamental point resulting from the research analysis and discussion is that the degree of practitioners' participation in ICT projects affects how well the system is perceived and utilised. This study has also developed a view of practitioners' knowledge as an organisational asset, developed through learning and sharing of knowledge, which contributes to improving service quality in social care organisations.

The study's results highlighted also that when social work practitioners are involved and given the opportunity to express their needs and their expectations they become engaged with the ICT project and ultimately they will facilitate its implementation. The study also demonstrated that when social care organisations aim to learn through giving and receiving feedback then staff feel valued and more connected with organisational procedures. Thirdly, the thesis claimed that organisational structure and ICT implementation are two interlinked phenomena, which need to be examined together. The influence of one on the other determines also how the system's end-users perceive the system and its components.

Furthermore, the thesis functions as an example for policy implementation because it suggests an approach which is differentiated by business management, as it combines social work's values with business tools such as knowledge management. For example, when managers consider their personnel as advisers and equal stakeholders in the process of producing services and delivering them, then it is possible to provide high quality services. The leading factor to suggest a model of policy implementation based on participatory management and organisational knowledge is that over time social workers

build up an increasing amount of knowledge on specialised practice and on organisational functions. Apart from the retrieval of specific parts of this knowledge for use in presenting data to clients or writing reports the rest of it remains largely under-used.

Organisational knowledge for this thesis was the second important concept because it was identified as a contextual factor that has the potential to lead to better social services outcomes and service quality. In this thesis, organisational knowledge was discussed as a future goal for social care organisations, which can be achieved with the utilisation of IS such as MIS. Organisational change is considered to be essential for MIS implementation as well as for involving front-line staff in decision-making. The research findings illustrated that although practitioners made substantial efforts to share practice knowledge and learn together, the organisational structure did not facilitate these initiatives. As a result their knowledge remains locked within the individual rather than becoming an organisational asset. Furthermore, Brody (2000) argued that the professional knowledge every experienced social worker has is unique and organisations must employ it in every aspect of their organisational life. Thus, the model of creating organisational knowledge through the basic steps a social worker uses every time he/she has a new case contributes towards this goal.

Finally, this thesis has contributed towards appreciating the fact that MIS can offer endless opportunities to social workers and their practice if it is perceived as a practice as well as a management tool. It is well known that MIS are developed to accumulate data, monitor performance and control expenditure. However, in the case of social care organisations they could become practice tools, provided that the end-users understand the opportunities offered and engage in a the culture of organisational learning and knowledge.

9.7 Limitations of the study

Generally the claims of the thesis about the value of this research study rest on complexity, depth and longitudinality rather than on size or representativeness and this needs to be borne in mind when considering the concerns discussed below. Any single study is bound to have limitations, and there are a number of issues affecting its performance in a given context like a PhD thesis. It is important to critically evaluate the results and the whole study by acknowledging its limitations. The present study has certain

limitations that need to be taken into account when considering the study and its contributions. However, some of these limitations can be seen as potential avenues for future research under the same theme.

This study has focused on two phenomena that are very extensive and major, i.e. practitioners' participation and organisational knowledge. Clearly this represents a challenging task for research regardless of the more specific interests that the study may have had. These two extensive and complex phenomena have been studied from a rather narrow empirical perspective. The selection of the two case studies naturally brings forth many limitations as far as the generalisation of the results of the study is concerned. Thus, the empirical setting, the two social care organisations and the implementation of the new MIS, can only be seen as a kind of "snapshot" of agency practice in two local authorities, at two particular points in time, and a pilot context for further research in policy development and management of social care organisations. It is, however, a feature of using case studies, as the focus for qualitative analysis that, by understanding something about these particular cases in more depth, we might eventually also learn something about more general phenomena. To study the implementation and use of MIS in social care organisations through multiple-case study design, for example, is clearly one of the future research challenges in this topic. Multiple-case study design would make it possible to test the proposed models of the study further.

Criticism can also be presented concerning the way the theories applied in this study. It has been strongly argued that this research contributes to social care organisations research. The theoretical base of this study can be described as being cross-disciplined as it includes such a variety of different perspectives. However, the purpose of adopting this kind of strategy has been to use the broad selection of different perspectives as strength, since there are many converging issues and concerns within Health and Social Care that are similar. The use of different perspectives was chosen on the basis of the literature research as it was concluded that little research has been conducted on social care organisations in terms of their management and how they involve practitioners in the decision-making.

9.8 Future Research

Research often indicates the need for more research. The results may point to a new topic or hypothesis. The conclusions may provide some insight that dictates further study. The current project may suggest other possible topics or avenues of investigation. Others may want to continue working on some phase of the project by expanding the study to a larger geographical area and involving more social care organisations. Someone else may try to test the applicability of the ideas developed by this project. Additional research with a larger and more diversified sample across several social care organisations could enhance the generalisability of these findings. It is not practical to investigate every single social care organisation, nor is the social care organisation representative of all aspects of social care provision, so it is reasonable to conclude that other organisations acting in the field of social care may be included such as voluntary or private organisations. Thus, issues of collaboration and communication with the external environment of social care organisations can be explored further.

In the future there are two directions this research might take. Firstly, the issues raised by this thesis in terms of practitioners' participation in policy development and implementation as well as decision-making could be explored. It would also be essential to evaluate the impact of capturing and disseminating organisational knowledge in social care organisations. The process of acknowledging and taking on board the changes which can occur from such a culture shift in social care organisations is one aspect that can be researched. An additional aspect could be the study of positive outcomes for social workers and their practice as well as for service users. An example could be whether professional development and job satisfaction is enhanced or not. In terms of organisational knowledge there are certain limitations. For instance, a research study on this topic could be developed if social care organisations in the future proceed in acquiring the technological infrastructure to gather and use organisational knowledge. Then, studies on the effect of this use for organisations and their service users could be expanded.

This thesis has also indicated that concern could not only focus on geographical variability but also on outcomes for social work practice, and through that for services users. Another direction would be to explore whether different models of implementation produce different outcomes for service users. This kind of research will need to involve service users as much as practitioners. For example, if social care organisations were operating under the proposed models then how the service's outcome would be affected?

To evaluate these outcomes the best possible approach would be to involve service users in the process of service design and implementation.

In addition, to widen the scope of future research it would seem appropriate to suggest pursuing research under different perspectives. Although practitioners' participation was considered to be the main field of study here, the adoption of other perspectives in order to understand the emerging issues from implementing advanced information systems represents a valuable stream of study to pursue. The perspective of service users would obviously be of interest too. Understanding the service users stand points and driving forces with regard to the utilisation of information technology by social workers in every stage of the intervention would also be of potential interest.

9.9 Epilogue

The purpose of this thesis has been to present the findings of an interpretive case study research on MIS implementation and organisational knowledge creation in social care organisations. The models proposed in this thesis function as a starting point of principles and concepts for which further research may be needed in order for them to be developed fully. However, the contribution in terms of social care organisations is that it places practitioners' professional experience at the centre of building a new kind of organisation in the field of social care. This would be an organisation that is based on its employees' expertise and practice knowledge to plan and deliver services. It has been apparent that combining the culture shift towards organisations that are expertise oriented and provide services according to their service users' needs by producing social work practice knowledge is an approach which can be developed in the near future. Professional experience, along with good quality supervision, informal and formal training as well as access to research evidence are the fundamentals for social care organisations in order to develop this kind of organisation.

By exploiting practitioners' social work practice knowledge and their knowledge about organisational procedures and good practice, organisations will be able to enter the era of digital information and knowledge. Thus, a better understanding of practitioners' capabilities and their possible contribution to organisational improvement is needed so social care organisations will make a step towards achieving that goal. It follows from this that the introduction of a new MIS and its influence upon the social care workforce and

social work practice will also highlight training and staff development needs across that workforce. Failure to document and address these needs, and to develop an agenda for action, might seriously impede the organization's overall capacity to achieve its MIS goals.

The utilisation of MIS has created organisational changes and instability in the beginning in social care organisations but it could also lead towards the appreciation of information technology as a tool of evolution and innovation for social care organisations. More generally, the results of this thesis pointed to the importance of identifying contextual factors impacting the actual use of MIS in social care organisations, as well as taking into consideration the capabilities of the system and the actions and interactions of social work practitioners within the system. The results of this research can then help sensitize future studies of MIS utilisation in social services, which can take into consideration the developed conceptualisations in order to examine the organizational consequences of MIS use as well as its influence on social work practice.

APPENDICES

Appendix 1 Interview Questions

Interview Questions for IT staff

1. Could you please describe your job?
2. Could you please give a short description of MIS currently used by social services? Role and objectives.
3. To what extent have you been involved to the design and implementation of MIS?
4. On what factors was the decision made in terms of which software to buy? Were the practitioners' recommendations taken into consideration or it was only down to financial estimations?
5. What problems/difficulties has the implementation stage faced so far and why?
6. What is the impact of this implementation on social services in terms of a) system users and b) services outcomes?
7. Could you please describe the strategy followed to involve practitioners? To what extent were practitioners at all levels of the hierarchy involved in the development and implementation of the system?
8. In your experience, what role could practitioners play in that process?
9. How does this involvement make them familiar with the systems and why?
10. What devices/tools do you have in place so that practitioners will exploit all the system's potential?
11. Have you noticed any constraints on the system's operation which depends on the users' familiarity? If yes, how do you think this can be resolved?
12. Are there any other IT applications which should be developed in order to secure efficiency of services and effectiveness of outcomes?
13. How would you evaluate the system's outcomes in terms of a) organisational knowledge and learning and b) management process?
14. How do you think IS help social workers translate their experiences into skills and knowledge?

15. How do you think the new IS will improve the knowledge management of your organisation?

Interview Questions for Senior Managers

1. Could you please describe your job?
2. How would you describe your involvement in MIS development and implementation?
3. How will you perform your managerial role from now on? Changes?
4. Do you think practitioners' participation could benefit the implementation process and why?
5. To what extent have practitioners been involved in the procedures of design and implementation of MIS?
6. How would you characterise the approach your organisation followed to MIS implementation?
7. How do you think MIS improve your organisation's responsiveness to the client's needs and how has this been achieved?
8. Can you describe any mistakes or malfunctions of the system which hinder your personal job and your organisation's effectiveness?
9. What changes do you expect from MIS implementation a) in your personal context of work, b) in your team, and c) in the organisation as a whole? What do you need to do to manage those changes?
10. How would you appraise the system's outcomes in terms of a) organisational knowledge and learning (e.g. does it help to improve practice) and b) management process?
11. How do you think IT/IS helps you and your team translate your experiences into skill and knowledge?
12. How do you think the new IS will improve knowledge management within your organisation?

Any other comments…….

Interview Questions for Team Managers

1. Could you please describe your job?
2. Could you please describe your involvement in MIS development and implementation and why?
3. How will you perform your managerial role from now on? Changes?
4. Do you think the introduction of MIS facilitates or hinders your work as a manager and why?
5. What changes do you expect from MIS implementation a) in your personal context of work, b) in your team, and c) in the organisation as a whole? How are you going to manage those changes?
6. To what extent have practitioners been involved in the above procedures?
7. Do you think practitioners' participation could benefit the implementation process and why?
8. How would you characterise the approach your organisation followed to MIS implementation?
9. How would you appraise the system's outcomes in terms of a) organisational knowledge and learning (e.g. does it help to improve practice) and b) management process?
10. How do you think IT/IS helps you and your team translate your experiences into skill and knowledge?
11. How do you think the new IS will improve knowledge management within your organisation?

Any other comments…….

Interview Questions for Social Work Practitioners

1. Could you please describe your job?
2. What do you think about the implementation of the MIS? Is it essential for your work?
3. Do you think that MIS has improved your personal and your organisational responsiveness to the client's needs?

   If the answer is negative ask alternative question: What do you think should be done to improve the current situation?
4. Can you describe any mistakes or malfunctions of the system which hinder your personal job and your organisation's effectiveness? (Previous and new system)
5. What role do you think front-line workers should have in the design, development and implementation of MIS?
6. How do you participate in decisions concerning changes at the operational level of the organisation?
7. How do you participate in decisions concerning changes regarding the adoption of new services?
8. How do you participate in decisions concerning changes regarding the adoption of new policies?
9. How do you think IT/IS helps you translate your experiences into skill and knowledge?
10. From your experience so far how, has IS helped you expand your mental and conceptual job skills?
11. Do you think the new IS will assist you in sharing and exchanging information, collaborating and solving problems collectively and how?

Any other comments…….

Appendix 2 Participants Informed Consent

May 2004

My name is Despina Cochliou; I am a qualified social worker and currently studying for my PhD in the Department of Social Work and Social Care at the University of Sussex. My research thesis is entitled: "**Towards a Practitioner-Centric Paradigm of MIS Development and Organisational Knowledge Creation in Social Care Organisations".** My supervisors are Professor Imogen Taylor and Dr. Elaine Sharland and they can be contacted at (i.j.taylor@sussex.ac.uk and E.Sharland@sussex.ac.uk).

Thank you for agreeing to take part in the project. Before we start I would like to emphasise that:

- Your participation is entirely voluntary;
- You are free to refuse to answer any question;
- You are free to withdraw at any time.

The interview will be kept strictly confidential and will be available only to the researcher. Excerpts from the interview may be made part of the final PhD thesis or reports, but under no circumstances will your name or any identifying characteristics been included in the thesis.

Please sign this form to show that I have read the contents to you.

_____ (signed)

_____ (printed)

Please send a report on the results of the project:

Yes No (circle one)

Address for those requesting a research report

_____

_____

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